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STUDIES OF THE AGED AND AGING

Selected Documents—Volume II

HEALTH AND HEALTH SERVICES

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INTRODUCTION

This second volume of the series presenting document on aging and the aged concerns one of the two or three most important problems facing older men and women: health and health services.

Many people, as they reach later life, are faced by a greater need for medical care at the very time their income is diminishing. They not only face higher medical costs, but, to the extent that they no longer live in a family group, they frequently have no one to care for them in their illness.

The documents in the present volume include some of the latest and most useful studies on this subject. Grouped under health care, hospital care, mental illness, and chronic illness, these documents discuss the health of older citizens from various points of view and describe some of the efforts currently being made to provide and finance adequate medical care. The opinions expressed, of course, represent those of the authors of the several articles and do not necessarily reflect the views of the staff or the Members of this Committee.

Also presented in the appendix to this volume are the latest available statistics on the kinds of health care provided for the aging and aged, the costs of such care, the extent to which older people use various health facilities, and the diseases which most commonly afflict the elderly. Because of existing gaps in our knowledge of the health conditions of older people, as well as of the population as a whole, these statistics cannot be complete. For example, many of today's estimates of illness and disability still depend on data collected 20 years ago in the National Health Survey of 1935–36, adjusted for population increases since that time. This was a onetime survey predominantly urban in coverage reflecting conditions during depression years, and made before discovery of the "wonder drugs" and new surgical, therapeutic, and rehabilitation techniques.

Recognizing the need to assemble up-to-date and more complete information, the 84th Congress approved a bill reported from this committee during the last session—the National Health Survey Act of 1956—which authorizes the Public Health Service to undertake a continuing nationwide census of illness and disability. This survey of the whole population will at the same time, of course, yield valuable new and much-needed facts about the health of the older portion of the American people.

In the meantime, the tables printed in the appendix of this volume must serve as among the best available.

SECTION A. HEALTH CARE

The papers included in the first section present the most recent information on the amount of medical care which older people receive, and its cost. Document No. 1 summarizes the results of the recent nationwide sample survey conducted by the Health Information Foundation (1952–53), with emphasis on costs, utilization of services,

and the amount of care older people are receiving under prepaid health insurance plans today. Document No. 2 describes types of noncancelable policies for people over 65 offered by private insurance companies. Document No. 3, dealing with private insurance available in rural areas of the country without reference to age, was included because the aged in these areas suffer the lame lack of insurance coverage as do farm people generally.

Documents No. 4 and 5 show the most recent data on Blue Cross and Blue Shield plans which provide prepaid insurance for health care for the older-age groups; and document No. 6 describes the protection offered by a Blue Cross, Blue Shield plan organized on a State basis (Michigan) which covers over half of the population of the State. Five percent of the total adult memberships is in the over-65 age group. Document No. 7 outlines plans organized by health cooperatives. Document No. 8 outlines a statewide program (California) which draws upon the activities of a variety of State and local groups to develop a program of health education and health services for older people.

SECTION B. HOSPITAL CARE

Section B of the volume assembles the most recent figures, information, and recommendations on hospital care for the aged. Document No. 9 analyzes the information obtained in a survey of people 65 and over receiving old-age and survivors insurance benefits in December 1950. This study added information as to the amount of bed care required for older people in homes and in institutions, as well as in hospitals.

Document No. 10 summarizes information gathered in a population survey in March 1952, conducted by the Bureau of the Census, which asked special questions on the ownership of hospital insurance and receipt of hospital care in 1951 for the 65-and-over age group. Documents Nos. 11 and 12 present the pertinent Recommendations of the Commission on Financing of Hospital Care (1954), and the recent recommendations of the Commission on Chronic Illness on the Care of the Long-Term Patient (1956). The provisions of the Hill-Burton Hospital Construction Act as they apply to older people are discussed in documents 13 and 14.

SECTION C. MENTAL HEALTH

Document No. 15 discusses public policy regarding mental health problems of the aging. Document No. 16 reviews State action for the aged in mental hospitals, and document No. 17 includes discussions by medical authorities in the field of mental health.

SECTION D. CHRONIC ILLNESS

Document No. 18 reviews the incidence of and trends in chronic diseases as they affect people 65 and over, as compared with other age groups.

APPENDIX

The appendix tables have been selected to supplement the documents with more detailed information in certain areas. They show

data bearing on the position of the aged in comparison with other age groups.

Part I of the appendix lists the kinds of illnesses besetting older people as revealed in the records of a (1) municipal general hospital (New York City); by (2) a survey of doctors' offices in a single State (Washington); and by (3) reports on home-care programs in New York and Philadelphia.

Part II supplements the data contained in document No. 1 with more complete figures on hospital admissions and length of hospital stay. It also includes earlier data (1943) assembled in the Public Health Service survey of the Eastern Health District of Baltimore.

Part III presents information on the use of health facilities by older people, as compared with other age groups.

Part IV contains data on medical costs and insurance coverage, including nationwide estimates of gross total charges for all personal health services. Separate tables show charges for hospital care, for physicians' services, for dental work, and for medicines and related incidentals. These tables are arranged by age, sex, and, when applicable, by insurance status. Also included in this part are data on health and insurance protection for workers in collective-bargaining plans which were assembled in the recent study by the United States Department of Labor (Bureau of Labor Statistics). A summary of this study appears in volume IV of this series.

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SECTION A. HEALTH CARE

STUDIES OF THE AGED AND AGING

1. COSTS OF MEDICAL CARE FOR THOSE 65 YEARS OF AGE AND OVER: A NATIONWIDE SURVEY OF COSTS AND UTILIZATION

Odin W. Anderson, Ph. D., research director, Health Information Foundation, New York City

Delivered at University of Michigan Ninth Annual Conference on Aging, July 10, 1956

I. Introduction

In a nationwide survey of families and individuals it was found hat the average costs for all private personal health services incurred by each individual in the general population was $65 a year. For those 65 years of age and over, the average annual cost for private care was $102. Although those in this age group comprised only about 9 percent of the population, they incurred 13 percent of the costs for all personal health services of the entire population.

The survey was based on interviews in the homes of a representative sample of families in the United States. The study was conducted by the national opinion research center, University of Chicago, and financed by the Health Information Foundation. The data gathered represent the experiences of the families for a 12-month period ending in July 1953. A complete report has been published,[1] but this article attempts to consolidate and present the information relating to the segment of the population 65 years of age and over.

II. Costs of Personal Health Services

A. GENERAL

During the year under study the American people incurred costs of private personal health services totaling over $10 billion, or $65 per person. Thirteen percent, or $1.3 billion, was incurred by the segment of the population 65 years of age and over, averaging $102 per person. In other words, those 65 years of age and over incurred charges 57 percent greater than that of the general population.

As an aside, personal-health services provided by various levels of government for recipients of old-age assistance total approximately $168 million, averaging over $66 per old-age-assistance recipient, and when spread out over the entire population 65 and over, averaging $12 per person. This does not represent all the costs incurred by

[1] Odin W. Anderson with Jacob J. Feldman. Family Medical Costs and Voluntary Health Insurance; a Nationwide Survey. New York, McGraw-Hill Book Co., Inc., 1956.

various levels of government, but very likely accounts for the largest portion of it. There is no way of determining the value of the substantial amount of free services contributed by physicians in their private offices and in hospitals.

It is thus likely, without attempting an exhaustive documentation, that expenditures on the part of government for all direct personal-health services (exclusive of mental hospitals) came to at least 12 percent of all costs of personal-health services for the segment of the population 65 years of age and over.

For the purpose of this conference I am less interested in attempting to account for every fraction of a dollar of charges for personal-health services incurred by those 65 years of age and over than I am in presenting a general outline, which can be used for broad planning. It is of great interest to learn, as I said previously, that those 65 years of age and over experience costs 57 percent greater than that for the general population, and also that although they constitute only 9 percent of the population they experience 13 percent of all costs experienced by the total population. As a contrast the segment of the population 5 years of age and under make up 13 percent of the population but account for only 6 percent of the charges for all personal-health services. Further, for purposes of planning, it is important to know that women 65 and over incur higher costs than men, $77 as against $124. This is true for males and females in the general population, as well.

B. AVERAGE COSTS BY TYPE OF SERVICE

A convenient and meaningful classification of personal-health services for the consideration of costs and utilization is as follows:

Physician
Hospital
Medicines
Dental
Other

Within physicians' services it is useful to break such services down into surgical, obstetrical, and other physicians' services. For the age group under consideration here and for all practical purposes we need not concern ourselves with obstetrical services.

Below is presented a simple table showing average costs by type of service for those 65 years of age and over and for the general population.

Annual cost per person

Type of service	65 and over	General population	Percent excess
Physician	$36	$25	44
Hospital	25	13	92
Medicines	22	10	120
Dentist	4	10	−60
Other	17	8	112

Only in dental care is the cost per person to those 65 years of age and over less than for the general population. The cost for surgery was $6 a year.

Next let me present the costs for those who have incurred costs.

Annual cost per person incurring cost

Type of service	65 and over	General population	Percent excess
Physician	$74	$57	30
Hospital	233	140	66
Medicines	42	26	62
Dentist	37	32	16
Other	61	38	61

C. DISTRIBUTION OF COSTS BY TYPE OF SERVICE

One of the chief characteristics of the costs of personal health services is the fact that in a year a few people incur relatively large costs tapering off to a few incurring no costs at all. This is true for any age group, but for those 65 years of age and over there is a tendency for a greater proportion to experience higher costs than other age groups. For example, 8 percent of the general population experienced costs of personal health services exceeding $200, as against 13 percent in the age group 65 years of age and over.

III. Utilization of Services

The segment of the population 65 years of age and over had a higher hospital admission rate, a longer average length of stay, and greater number of hospital days per 100 persons than was true of the general population. The admission rate for those 65 and over was 13 per 100 as against 12 per 100 for the general population. The average length of stay in general hospitals was at least 12 as against 7.4 for the general population, and the number of days per 100 was over 150 compared with 90 for the general population. In summary, those 65 years of age and over constituted only 9 percent of the population but accounted for at least 15 percent of all hospital days. As was true in general, female utilization was higher than male utilization.

In surgical procedures those 65 and over appear to have fewer operations than the general population, a rate of 6 per 100 as compared with 7 per 100. If the severity of the operation could be determined it may be that the older segment of the population would show that operations performed on them would be of a more major nature than for the general population.

We were able to make some estimates as to the proportion of people by age group who did not see a physician in a year and those who consulted one 15 or more times. About 35 percent of those 65 years of age and over did not consult a physician in a year compared with 40 percent for the general population, and 48 percent in the age group 6 to 17, the age group least likely to consult a physician. Thirteen percent of the age group 65 and over, however, saw a physician 15 or more times compared with 7 percent for the general population. Again, females were more likely to consult physicians than men.

IV. Health Insurance

Between 30 to 35 percent of those 65 years of age and over carry some kind of health insurance, compared with about 60 percent of the general population.

Normally, for the general population insurance is associated with higher utilization and higher costs even for uninsured services. Among those 65 years of age and over the difference is not striking except for hospital care as indicated in the table below.

Costs for 65 years of age and over

Type of service	Insured	Uninsured
All services	$111	$98
Physician	36	36
Hospital	31	22
Medicines	23	21
Dental	3	5
Other	19	16

V. Observations and Implications

In the foregoing I have indicated that people 65 years of age and over on an average utilize more personal health services and incur higher charges than the general population. The percent of costs in excess of the general population on the face of it seems frightening, namely, 57 percent for all personal health services, 44 percent for physicians' services, and 92 percent for hospital care. The saving factor, however, is that those 65 years of age and over comprise only 9 percent of the population so that if the cost of those 65 years of age and over in excess of the per person average for the general population is spread over the entire population, the increase per person is quite modest.

Can the aged segment of the population carry their own cost in an insurance program after they reach 65 in the face of lowered earning power, and increasing disability, despite the absence of financial responsibility for young dependents? What are the relative responsibilities of employers, the working population under 65, the aged themselves, and of government? This is a matter for general social policy. What I am establishing is what appears to be the problem, and several alternative or joint solutions can be suggested by those who formulate policy and hold the purse strings.

If we are thinking of specific services, it will be recalled that the per person charges for physicians' charges were $25 for the general population and for those 65 and over $36, a difference of $11. If these $11 were spread over the population under 65, the increased per capita would be $1 or approximately 4 percent, and the aged would be receiving $36 worth of physicians' services for $25.

For hospital care the general population experienced a per capita cost of $13 and those 65 years of age and over $25, a difference of $12. If the $12 were spread over the population under 65, the increased per capita cost would again be $1 or approximately 8 percent, and the aged would be receiving $25 worth of general hospital services for $13.

If we are thinking of total costs of personal health services it will also be recalled that the per person incurred charges for personal health services in the general population were $65 a year; for those 65 and over the incurred charges were $102. If the difference between $65 and $102, namely $37, was distributed over the population under 65 years of age, it would raise the per capita cost by $3 or 5 percent. Thus, the aged would theoretically be receiving $102 worth of services for $65.

Admittedly, this is speculative but based on as good data as are available and undoubtedly portrays general patterns. These estimates assume present costs and utilization, and do not take into account possible costs of administration. Expansion of nursing home care, home care, and other services would naturally change present patterns.

(NOTE.—Tables 5–8, 27, and 29–38 in the appendix present in more detail the information summarized in this paper.)

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2. TRENDS IN HEALTH INSURANCE OF THE AGED

H. W. Steinhaus, Ph. D., Research Assistant, President's Staff, the Equitable Life Assurance Society

Delivered at Ninth Annual University of Michigan Conference on Aging, July 10, 1956

The Health Information Foundation's survey on family medical costs [1] indicated that the expense incurred for private health services in the United States during the 12-month period ending July 1953 totaled over $10 billion. At the time these figures became available to me I had just received similar figures from the British National Health Services, and I found the comparison quite instructive. I realize that I was comparing a national health-insurance system with private health care in our country. However, some 60 percent of our population do carry some form of private health insurance and the total cost of the English system, of 3½ percent of their gross national product is quite comparable to the United States total cost of 3⅓ percent of our gross national product.

In England, for the general population, the actual annual gross cost per head was £10, compared to $65 in the United States, but £17½ for those 65 years and over, as compared with $102 in Dr. Anderson's survey. Different from the American experience, there was scarcely any variation between sexes, but considerable difference between the married group on the one hand, and the single, widowed, and divorced on the other. The single group makes about double the demand on hospital accommodations that the married group does, therefore about two-thirds of all hospital beds in England and Wales occupied by those aged over 65 were taken by single persons. Marriage and its survival into old age appears to be a powerful safeguard against admission to hospitals, particularly "chronic" hospitals.

It may come perhaps as a shock to those who believe that national insurance can solve the problem of providing adequate medical care for our senior citizens to look at some of the conclusions reached by the authors of the cost study of the English health services, such as: Serious difficulties were experienced in providing adequate services because the demand of the aged for services greatly exceeded the supply; as a consequence the old age groups were receiving either a standard of service lower than contemplated by the legislation or, in some areas, no service at all.[2] It should also be noted that similar to an earlier German experience, the English system experienced so much waste (politely called excess utilization of free services) that it had to introduce charges for dentures and spectacles (May 21, 1951) and for pharmaceutic services (June 1, 1952) which reduced the cost of these services by one-third.[3] The abuse of the privilege of free

[1] Odin W. Anderson with Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance A Nationwide Survey, New York, McGraw-Hill, 1956.

[2] Report of the Committee of Enquiry into the Cost of the National Health Service, January 1956, Cmd: 9663, pp. 214-215. Brian Abel Smith and R. M. Titmuss, The Cost of the National Health Service in England and Wales, Cambridge University Press, 1956, p. 69.

[3] Report of the committee, par. 22, p. 10.

services, the basic reason for the introduction of modest self-insurance features, has also brought about some similar features in private health insurance.

Another highlight of the English study which has a direct bearing on the problem of privately insuring medical care, is the enumeration of the reasons why cost estimates are sheer guesswork. One of the more obvious reasons is the trend of prices for services, medicines, and construction of facilities. A private insurer, who guarantees the reimbursement of the cost of a service (even if in part only, or in excess of a deductible) must either project the trend of prices or retain the privilege of premium increases. Other factors that influence the cost are either medical or social.

Medical factors involve changes in the incidence and character of sickness and injury, standards of diagnosis, quantity and quality of treatment, the growing use and importance of outpatients departments, and of diagnostic clinics. Social factors of age, sex, family relationships, class, and income play a variety of roles in determining the pattern of demand. As the standard of living rises, the demand will rise too, irrespective of the medical factors involved.

Obviously, no one can estimate the effect of medical progress on the cost of providing medical care, nor the effect of a generally rising income level. I do not know whether a system of national health insurance will be adopted in the United States, but private health insurance is here to stay. We might note as a parallel that in the field of old-age security really adequate pensions are provided only by the addition of private annuities. Similarly, really adequate medical care apparently requires additional private efforts. A striking example is Alberta, Canada, where two of the Blue Cross contracts are designed for the specific purpose of providing services supplementary to the standard ward contracts of the Government plan.[4]

With this background of the cost problems of national insurance, the limitations on private insurance policies might be better understood. First of all, none of the individual hospital and medical care policies (as contrasted to group coverage) contain guarantees as to both renewal and cost. If the premiums are fixed, renewal is not guaranteed. If the policy is noncancellable, the premium charges may be increased, although not on an individual basis, only on a class basis. In this manner, some safeguards are introduced against rising costs, although there is always the possibility that an increase in rates will set into motion an increase in selection against the insurer because the better risks may resent the increased charges and drop out, which in turn may lead to another increase in charge. There is only one way to limit the total liability and that is by the imposition of an overall maximum payment after some age such as 65. As experience develops, this maximum may perhaps be increased.

Self insurance is accomplished either by insuring a given amount below the actual cost, or by insuring a given percentage of the costs, or by the introduction of a "corridor" only beyond which the insurance becomes effective, or some combination of these three.

I have been instructed to focus my discussion on noncancellable policies for people over 65 which simplifies my assignment. The Metropolitan Life issues two types of individual or family hospital and

[4] Malcolm G. Taylor, The Administration of Health Insurance in Canada, Oxford University Press, Toronto, May 1956, pp. 240-241.

surgical expense policies. One is paid-up at 65 with issue ages up to 55, the other one with annual premiums and issue ages up to 75. Both policies are noncancellable. They provide after age 65 unlimited surgical benefits based on a schedule which has a maximum of $300, but for each policy year only 31 days of hospitalization are allowed plus a maximum of 5 times the daily rate for room and board, which ranges from $7.50 to $15. In the case of the paid-up policy, the maximum payment on account of any one disease is 180 times the daily benefit. In the case of the continued premium policy, there is no such limit but successive periods of hospitalization for the same or related cause are treated as one period of hospitalization, unless separated by at least 1 year. There is no overall maximum imposed.

The Guardian Life Insurance Co. issues a noncancellable form of major medical insurance. For each covered person the total benefit limit is $7,500 after age 65, with an additional sublimitation of $1,000 for each surgical fee, $25 for each day of hospital confinement and three-fourths of the charges of registered nurses for private duty nursing care. Drugs and medications prescribed by a physician, wheelchair rental, iron-lung use, and the original cost of prosthetic appliances are included. There is a novel deductible amount based on the income of the insured in the preceding taxable year, ranging from a minimum of $250 to a maximum of $1,000 for incomes over $25,000.

For those under 55, in good health, not insured otherwise, and able to afford the premium cost, the purchase of both the Metropolitan and Guardian Life contracts would represent a quite satisfactory noncancellable protection for an individual and his wife during their retirement period.[5] The combined annual premium cost is less than $100 for an individual under age 39, and about $175 at age 55. There are other policies available of somewhat more restricted nature. The Prudential, for instance, issues a hospital and surgical policy, but only to persons between ages 60 and 70, paid up at age 80, noncancellable but with the right to change premiums, and with an overall limit of 200 times the daily hospital benefit rate. The Mutual Life of New York will also issue a guaranteed renewable hospital policy with a $50 deductible and a $1,000 overall limitation.

Other commercial hospital expense policies are renewable after age 65 only at the option of the company, but serious efforts are made by some of these companies to avoid cancellation by introducing additional safeguards. For example, one company adds for subscribers in poor health a special deductible amount equal to 1 year's premium, and another created a pool for the less healthy risks, toward which are allocated 100 percent of the premiums, so that in effect the agent contributes his commission and the insuring company its expense margin.

This discussion has been limited so far to insurance possibilities for persons who do not have any other insurance. However, as was pointed out, about 60 percent of the general population and even one-third of the older population have some health insurance. In most cases Blue Cross and Blue Shield plans will carry their subscribers past 65, and a recent survey of the Bureau of Accident and Health underwriters [6] indicates that some 36 insurance companies permit employers to include retired employees under group coverages.

[5] The benefits under these policies are more liberal prior to attained age 65, but the differences are not enumerated since we are mainly concerned with benefits at and above age 65.

[6] Bureau of Accident and Health Underwriters Group Disability Insurance Bull. No. 137, March 8, 195

Obviously, a person covered for some hospital or surgical benefits under such a plan would obtain fairly complete protection by the addition of one or the other of such individual policies. However, the trend is toward increasing liberalization of group hospital and medical insurance plans, in the form of complete and comprehensive protection plans with a small deductible per year and some coinsurance. Such benefits may be carried over into retirement, perhaps with some additional restriction on total liability. Since group coverages do not require a medical examination and have a lower cost because of employer participation and wholesale administration, I would expect that the greatest progress in achieving insurance protection would come about along such group lines. In my own company, we insure our own retired employees against hospital, surgical, and medical expenses, nursing, physician's services, appliances, medicines, etc., excluding only dental work, eye corrections and hearing aids. The maximum is $1,500 for the same or related causes and $3,000 for an individual during his lifetime. We have a deductible of $75 for each cause and reimburse 75 percent of the charges insured. This type of plan is being offered to our group clients and I consider it the most desirable plan from both cost and benefit viewpoints that has been evolved.

Comprehensiveness of coverage, even though there are limits on reimbursement, seem to us more desirable than partial coverage with more liberal limits, particularly since the cost obligations involved in such an extremely liberal plan as was recently adopted in the rubber industry may prove excessive. This plan provides for the cost of semiprivate hospital accommodations up to 120 days for any confinement. New periods of confinement become established after an interval of 3 months. Surgical benefits are provided up to $250 per operation and doctor visits to the hospital in cases where no operation is involved are also provided for a period of 120 days at a rate of $5 for each of the first 2 days and $3 for each day thereafter. The employer assumed the entire, almost undeterminable, cost of the plan.

One of the great difficulties of estimating the cost arises from the duration and severity of the last illness. It has come to our attention that some employers have been advancing the amount of group life insurance of retired employees who have no dependents. Without a contractual commitment, they have helped an employee to pay the expenses of his last illness and perhaps make his last days more comfortable in that way. Utilization of some life insurance for such purposes might be a trend which would perhaps permit a more liberal treatment of other illnesses.

No solution seems on hand to meet the needs of the medically indigent by any other method than the one now being used. Physicians will continue to give freely of their time and, according to a recent English survey,[7] render considerable more services to those aged 65 and over than to the younger ones. The President's Commission on the Health Needs of the Nation found [8] that hospitals do not charge local governments the full cost of services rendered to those unable to pay, and that therefore those who pay, through insurance or otherwise, carry a share of the burden.

[7] Studies of a General Practice, British Medical Journal, January 16, 1954.
[8] Vol. IV, p. 112.

3. INSURING THE RURAL POPULATION

By Edwin M. Erickson, group insurance manager, Farm Bureau Mutual Automobile Insurance Co.

THE CHALLENGE

Problems are opportunities in work clothes. One of the most challenging opportunities facing the accident and health insurance industry today is that of insuring our rural population more adequately. In speaking of our rural population, we are talking about one-third of our population, roughly divided in half between farm and nonfarm families, which is a significant market and deserves added attention by all of us.

Let us approach this opportunity by examining it in some detail, reflect upon current influences, look at some industry experience, and finally, let us see what can be done about it.

First, it appears that as coverage for our urban population progresses each year, the rate of growth of coverage, as well as kind and level of benefits, lags behind for our rural people. Some writers such as Drs. Mott and Roemer and Serbein have studied the problem in recent years at some length and appear to be discouraged with the progress of voluntary efforts in providing better medical care. Both the Clark report to Congress and the more recently released Anderson study sponsored by the Health Information Foundation, as well as the recent Dewhurst survey published by the Twentieth Century Fund, bear out this disparity in some detail.

The Anderson study brings out the following significant facts:

1. Coverage for some type of health insurance: 70 percent of urban families, 45 percent of rural farm families.

2. Coverage for hospital insurance alone: 63 percent of urban families, 38 percent of rural farm families.

3. Hospital admissions per 100:

	Insured	Noninsured
Urban	12	9
Rural nonfarm	14	11
Rural farm	17	9

Thus, it appears that hospital utilization by insured rural families is significantly greater in frequency than by our insured urban families, whatever the causes may be. The real question may be, if the same proportion of rural families had coverage for the same period of time as our urban families, would there be any significant difference in hospital utilization?

The Clark report indicates a wide difference in coverage between urban and farm States, high-income and low-income States. The Clark report also indicates greater insurance coverage present in

States with a greater ratio of physicians and hospital beds. A Survey of Insurance Programs on Some 587 New York Farms, made by John R. Tabb of Cornell University, showed some form of accident and health coverage was carried by two-thirds of these farm families in 1953, which corroborates the Clark report.

The Federal farm health insurance program of the United States Farm Security Administration, started in 1936 and officially ended in 1946, was generally unsatisfactory. Launched to help low-income farmers, this experiment showed a high incidence of illness, a dispersion of insured families affecting collections, an insufficient spread of risk, inability to pay, and lack of adequate medical care facilities. The recently announced Benson program to assist marginal farm families to improve their operations or gain industrial employment may materially help this rural living standard problem in the near future.

While progress is gradually being made in providing more adequately trained medical personnel and medical care facilities in rural areas in recent years, the need continues to be great in many areas. The good work of our medical societies, and certain health foundations in the development of regional coordination of health programs and later incorporated by Congress as a guiding principle in the Hill-Burton Act must be recognized. Over half of the projects approved under the Hill-Burton Act have been in rural areas. These developments, as well as the improved rural public health programs, will lead to a better rural health insurance market.

While the need for more adequate rural health insurance coverage appears to be broadly understood, we in the insurance industry cannot lightly dismiss it because the solution poses much difficulty. It is axiomatic that better health facilities are provided when more adequate financing of medical care is made possible; voluntary health insurance coverage is financing an increasingly more significant portion of the costs of medical care in the United States. Aside from the aged, our rural population is one of the greatest remaining health insurance markets. This need must be met, and will be met, but the question before the house is whether the institution of voluntary health insurance will meet the challenge. At our shop, we have long accepted the principle that "people move ahead whether institutions do or not." The emphasis on this problem in the Federal reinsurance proposal is evidence that this is true. Let us hope that task force No. 3 considers this reinsurance problem in its efforts to make our industry efforts more effective.

Basically, our major problem in more adequately insuring the rural population is that of better distribution of accident and health insurance in rural areas. Secondarily, we may have a product and underwriting problem but I am confident that our actuarial and underwriting people are capable of meeting the needs in this area, if expanded distribution develops the volume possibilities of the big rural market.

Let's consider some of the current rural market influences and developments which should give us real encouragement that better distribution is both possible and practical.

GENERAL

Improvement in transportation, communications, and education in rural areas in recent years are helping to create more insurance consciousness. At the same time, economic conditions have improved

in many rural areas so that the ability to pay and the desire to have the benefits of accident and health insurance are greater than at any time in the past.

INCOME

There is evidence to support the statement that rural incomes are improving. United States Department of Agriculture figures show that despite the drop in total farm income, the gain in per capita farm income since 1940 has increased sixfold, though the uneven distribution is still a problem. Along with industrial decentralization and better roads in many rural areas, more rural residents are finding factory and other employment, which has favorably affected rural family income. I quote Roy Longstreet's conclusion from his article in the January-February issue of the Harvard Business Review, Sales to Farmers:

> In conclusion, I wish to make it clear that I am not as optimistic about the future of the farmer as is the remark I heard over the radio recently to the effect, "My head is in the clouds and there is nothing anybody can say or do that will bring my feet back on the ground." But I do feel that there are forces at work today that make our country a land of opportunity for all groups. And I am sure that the farmers are going to get their share of the increased prosperity that lies ahead.

And, I may add, improved prosperity for farmers will make possible a more prosperous rural economy as well.

FEDERAL PROGRAMS

The United States farm security health insurance program previously mentioned has probably affected more farm people than any single health insurance plan before or since. The recent extension of social security to the self-employed will affect a large proportion of rural families by creating a floor of security which will make them better prospects for both accident and health and life insurance.

WORKMEN'S COMPENSATION

While only one State, Ohio, requires compulsory workmen's compensation coverage for farm employees generally, most States require that many employees in dangerous occupations be covered, and likewise most States permit voluntary coverage for farm help. Coverage under workmen's compensation and employer's liability has grown in rural areas during the past few decades, creating insurance consciousness as a result of medical care and disability payments.

NONOCCUPATIONAL DISABILITY BENEFITS

In the few States where nonoccupational disability legislation has taken effect, the requirement of this coverage has reached into rural areas and created additional insurance consciousness.

EFFECTS OF AUTO FINANCIAL RESPONSIBILITY LAWS

Probably the greatest single influence during the past decade or so upon the rural resident has been the effect of automobile financial responsibility legislation throughout the United States. Virtually every State in the Union now has some form of financial responsibility for the motorist and this has resulted in a high level of auto insureds even in rural areas.

In addition to bodily injury auto coverage, supplemental coverages such as medical payments and travel accident, are bringing more insurance money every year into the hands of rural insureds and claimants alike, not to mention attorneys, doctors, hospitals, and burial services.

"THE BLUES"

In many rural areas, the "Blues" have been aggressively soliciting individual memberships, as well as working through existing community groups with considerable imagination, thus extending their services with admirable vigor.

THE INDUSTRY

From the accident and health insurance industry viewpoint, my previous discussion has concerned external influences. Any intimation that our industry is not actively serving the rural market is without basis in fact. Many companies have a fair volume of rural business, while some have made special efforts to serve the rural market. Before any suggestions are made as to how we can better insure the rural market, it may be helpful to review briefly some of the industry approaches and experiences.

By and large, most accident and health insurance policies in force in rural areas have been sold as individual policies, though group selling efforts have resulted in a fair amount of coverage.

Five principal avenues of distribution have been used; namely, direct sales through advertising and direct mail, publication subscription tie-in sales, multiple-line agency such as the typical general insurance agency, through combination life and accident and health agents, and monoline agents or specialized accident and health agents. In a few rural areas, industrial type accident and health agents are serving quite well.

In the sale of individual policies, it has been a real problem in rural areas to recruit and train sufficient resident agents to properly sell and service rural people. The wide variety of policies, differences in coverage, benefits, and policy language have been confusing to the average rural agent no less than the rural insurance buyer. The recent trend toward the use of chassis-type policies will be helpful in simplifying agent training and buyer acceptance as well as company handling.

As a result, much of our present business in force in rural area is of the limited-benefit type, such as limited accident, specified disease, accident only, or low-benefit hospital and accident and sickness coverage. Also, too much of our in-force business has been sold by mail or by nonresident agents, who are not in a position to interpret

policies to rural residents at the time of claim. Present trends toward more widespread careful underwriting of new business and more liberal reunderwriting is encouraging, but if post claim original underwriting had not gained such prominence in the public mind, is it any wonder that we have the present rash of undesirable legislation? Rural people are sensitive and news travels fast; our rural politicians are a power in most State legislatures and while we can rue their understanding of the problems involved, we cannot ignore their activity which springs from much poor public relations back home.

Since our industry experience is collected on an occupational basis, no fast conclusions are possible in respect to rural coverage as a whole. Few companies have a sufficient volume of rural coverage to be considered credible, our own company included, but our opinion of our rural individual experience is good, better for hospital and surgical than accident and sickness though it is still good, while accident alone has been very good.

With individual hospital and surgical, no particular underwriting or claims problems appear to exist, for we try to do a careful job on both counts, use few waivers and a very minimum of post claim reunderwriting.

We are offering individual major medical and acceptance in rural areas has been fair for such a new coverage, though it is much too early to have any experience development of consequence.

In regard to individual accident and sickness coverage, no special troublesome problems with rural risks are observed. Again, our underwriting and claims are carefully handled. Strangely enough, the "at work" control largely lacking in farm risks has not been as much of a problem as it has with some other occupations. We watch income carefully, but will make due allowances for income in kind on a case to case basis, when that will be cut off during disability. Fluctuating income for farmers, both as to seasons and from year to year, does not appear to give us particular trouble, which speaks well for the innate honesty of most farmers. We give preferred treatment to farm owners and managers in regard to occupational classifications. We permit agent field issue of one of our commercial type disability policies with benefits up to $200 a month. We also offer a noncancellable, guaranteed renewable policy to farmers.

We believe the rural market, including farm families, needs no special policy language or coverage nor particular underwriting or sales skills for satisfactory results. Patience and understanding will bring good experience for any company in the rural market and properly sold, such volume will build slowly but steadily and requires good service for desirable persistency.

In the spring issue of the CLU Journal, Mitchell Hutchinson discusses, What About Disability Income, from both an individual and group standpoint for the United States as a whole. The industry figures cited for individual policies show an actual reduction in policies in force for the period 1947–53, while at the same time premium income increased. In urban areas, group coverage may have replaced some individual policies and reduced the number of policies, but it is hard to believe that group has penetrated the rural market for disability cover to any great extent. Disability and accidental death and dismemberment coverage is still largely within the preserve of our industry. The potential for such coverage is still tremendous. How

good a job we do in packaging such cover along with health insurance, the imagination and ingenuity we display in its distribution, will have much to do with our success in penetrating all markets and prove our leadership against possible further encroachment.

It is in the area of mass selling that a fair amount of development has been going on in rural areas by our industry. The Health and Accident Underwriters Conference in 1953 conducted a study among some 20 or more member companies writing rural group business. The chief problems mentioned by companies were: Lack of participation; lack of accurate research and records; lack of initiative of key personnel collecting premiums; underwriting older persons.

Two principal methods of group handling were found prevalent. First, through cooperative farm marketing and service associations, patron groups, church groups, and in one case, among farm depositors in rural banks. Second through county farm bureaus with group variations.

Much hope for utilization of group insurance concepts among rural groups still exist. Whether true group contracts are used or other types of handling such as association group, blanket or franchise, the statutes and individual situations should govern. Suffice it to say that rural residents are inveterate joiners and numerous organizations of all types exist which can use group insurance concepts to the advantage of their membership.

The growth of the small group application to employers of from 10 to 25 employees offers much opportunity in rural areas. The conference study showed two companies with farm bureau operations. The California plan operated through the State farm bureau organization covers some 20,000 members for hospitalization and surgical benefits. At present, our company covers county farm bureaus in 3 States, but it is the plan in Ohio, which is the largest, covering some 20,000 members, and has been in existence some 13 years, that I would like to describe in more detail and should be of some interest.

The Ohio plan covers active farm members and eligible dependents of the various county farm bureau associations, including county cooperative employees, agricultural teachers and extension workers. Benefits have been revised and at present a $7 a day, 31-day hospitalization benefit, a $200 surgical schedule, with 100 percent of all actual and reasonable miscellaneous hospital services and polio coverage is provided to both members and dependents.

Participation continues around 50 percent but most significantly a recent survey of age distribution shows 10 percent over 55 and under 60, another 10 percent over 60 but under 65, with about 30 percent over 65, or about 50 percent of the group insured is over age 55.

A study of claims paid shows about 70 percent of the bills incurred for services are met by benefit payments within the contract provisions. If known additional medical costs incurred were taken into consideration, the proportion of bills actually met would be about 65 percent:

1. 59 percent of the room and board portion were reimbursed.
2. 92 percent of the miscellaneous medical costs were paid.
3. 62 percent of the surgical bills were reimbursed.

As you can imagine, the experience of this plan has not been particularly satisfactory from a loss-ratio standpoint. In spite of the overage member problem, the new member participation difficulties, and collection administration problems, both the Ohio Farm Bureau

Federation, our sponsoring body in Ohio, and our companies share a feeling of pride in the insurance service provided through this plan to these rural residents over the years.

One claim incident may be of particular interest. In one county area, not in Ohio, we discovered an unusual number of short-stay hospital claims. Upon closer examination, it was found that several doctors were hospitalizing patients unnecessarily for the purpose of normal calls. After a conference with the hospital staff concerned, our experience was improved. Incidentally, the hospital staff was surprised to learn the amount of medical care we were financing each year in their county. This type of experience has not been confined to rural areas, for we have had the same situation in urban areas which was discernible. At this point, I would like to pay tribute to our hospitals and the medical profession generally. Over the years, our experience with them in connection with auto claims, other casualty lines, life, and accident and health has been almost without exception quite excellent, especially in rural areas.

CONCLUSION

I believe it is clear that there is a real need for more health-insurance coverage in rural areas. It is also true that there is increased ability to pay for health-insurance coverage. Likewise, it is true that, despite poor public-relation rumbles, rural people will buy more adequate health-insurance coverage if it is properly sold and serviced. We need better distribution in rural areas to meet the opportunity.

Healthy competition must be encouraged in rural areas by our industry. The known rural market is certainly large enough to engage some attention by all accident and health carriers. In fact, the entry into the accident and health field by additional life carriers with existing rural agency plant should definitely be encouraged. The very dispersion of the rural market will prevent any small group of companies from meeting the need for more adequate health-insurance coverage. This is an industry opportunity as well as an industry obligation.

The mere appointment of more rural resident agents will not be enough; agents must be educated, trained, and motivated to do a job of sound health-insurance selling and service. Combination selling with life insurance is quite feasible in the rural market.

Just as life insurance is the only way known to man to create an immediate estate, so, too, is health insurance the only way known to provide dollars when accident or sickness strikes. Only capable salesmen are worthy of this trust. The rewards for this kind of service to people are good. Proper leadership will provide quality distribution.

If our industry wishes to preserve the institution of voluntary health insurance, it must meet the needs of people. We are meeting the needs, the increasing needs, of the urban market better each year. I am sure we can show greater progress in meeting the needs of the rural population if each of us will do our part and encourage positive action now.

Our health-insurance industry is a humanitarian enterprise; it is becoming a great force in our economy. Let's remind ourselves that the price of real greatness is continued growth and progress in the service of all our people.

4. BLUE CROSS PROVISIONS FOR PERSONS AGED 65 AND OVER, JANUARY 1956 [1]

By Agnes W. Brewster, Division of Research and Statistics, Office of the Commissioner, Social Security Administration, Department of Health, Education, and Welfare

Blue Cross plans are the major source of prepaid protection against the costs of hospital care among the population aged 65 and over. The membership of older persons in the Blue Cross plans stems from 1 or 4 types of contract, listed in the order of their numerical importance:

(1) "Left employ" (i. e., "left group") contracts.
(2) Nongroup contracts.
(3) Group contracts, where the 65-year-old is still working.
(4) Group contracts which include retired as well as active employees.

Most of the people in the higher ages who are enrolled in Blue Cross plans have converted the group contract which covered them while still at work into a "left employ" contract which has enabled them to continue their protection and that of their wives and families after retirement. Some persons past 65 acquired coverage on a nongroup basis prior to passing this milestone and are continuing this coverage. Since 51 plans will enroll persons as part of a group regardless of age, some older people who are still at work have become initially covered after their 65th birthday. Increasingly group contracts are being written to provide continuation of protection to active employees whose retirement occurs after the contract goes into effect.

A variation on the more usual methods of covering older persons has been developed by the Federal Reserve banks' retirement plan. Their retired employees, formerly covered as "left employ" members of Blue Cross plans throughout the country, have been turned into a group. Their Blue Cross premiums and benefits are now uniform regardless of their location. Premiums are deducted from their pension checks and transmitted to a single Blue Cross plan.

Table 1 shows the age limits in effect in the 80 Blue Cross plans for initial enrollment on a group or nongroup basis. While 51 plans have none, 29 plans have age limits on group enrollment and 5 of these plans do not offer any form of nongroup enrollment. Among the 75 plans that have mechanisms for nongroup enrollment, 9 have no age limits, but the majority do not accept people who have passed their 65th birthday. Nongroup enrollment is permitted throughout the year in a few Blue Cross plans but generally the plans open their enrollment briefly to nongroup applicants once or twice a year for a short period in an effort to limit the chances of too adverse a selection

[1] Prepared by Agnes W. Brewster from plan summaries in the Blue Cross Guide, January 1956.

Source: Research and Statistics Note No. 32, August 13, 1956. U. S. Department of Health, Education, and Welfare, Social Security Administration, Division of Program Research.

of risk. Exclusion of coverage of preexisting conditions or coverage only after a waiting period is usual for nongroup enrollment; 59 of the plans require a health statement with the application. Some plans may refuse to enroll a person in poor health.

Since the majority of older members in Blue Cross plans are now and are likely in the future to have their protection through a "left employ" contract, it is of interest to examine the cost of this protection, the benefits available, and the significance of added premium costs of "left group" contracts in relation to the reduced income of those who are retired and no longer benefiting from employer participation in premium costs.

Table 2 shows the annual "left employ" premium rates charged for 1 person and for family coverage among the 80 Blue Cross plans. For a single person the median is between $24 and $30 a year, or $2 to $2.50 per month. For a family the median is between $60 and $66, or $5 to $5.50 per month. The range for a single person is from $1 to $5 a month and for a family from $3.50 to $10.

The cost of a nongroup Blue Cross contract for 1-person coverage is the same as for a "left employ" single person contract in 56 of the 75 plans that offer nongroup enrollment. In five plans the cost is somewhat less because the benefits are reduced or the restrictions are more stringent. Eleven plans charge more for the nongroup contract than for the "left employ" contract. In two plans the nongroup rate is raised when the member reaches age 65.

The number of days of hospital care per person aged 65 and over averages about double that for younger adults. Blue Cross plans vary in the extent to which they attempt to confine these recognized added costs to the groups containing high proportions of older persons, or pass them along to the entire membership of the plan. Increases in premium or reductions in benefits are designed to offset the higher utilization of the "left employ" subscribers. Some of the increase covers the additional cost of handling individual billings and collections of premiums, obviously more expensive than group billing and collection of premiums through payroll deduction.

In all but two plans, premium rates for "left employ" contracts are higher than those for the group contract (table 3). Of the 2 plans that do not increase rates, 1 does reduce the scale of benefits. A total of 56 plans maintained the same benefits but increased premium charges by amounts varying from less than $3 to more than $15 for a family. Twenty-three plans reduce benefits below those available to group members, with all except one plan also adding to the annual premium cost.

Among the 23 plans which are counted in table 3 as reducing benefits for "left employ" members, there are 10 in which the member must accept a lower scale of benefits than were available under the group contract and 13 in which the member is restricted to certain certificates, and the scale of benefits is also below the level for the group. Straight reductions in benefit days or application of the benefit days per year rather than per disability is the most usual form of reduction. Other reductions are achieved by limiting the per diem benefit.

In the preparation of table 3, comparable group and nongroup contracts were used to determine differentials in the two rates. Twenty-

seven plans restrict the "left employ" member to certain certificates after leaving the group. The restriction generally takes the form of making him ineligible for the more comprehensive certificate offered by the plan on a group basis (such as 70 or 120 days per disability), and limiting him to the standard contract. However, 30 of the 80 plans continue the same benefits after leaving the group. Table 4 shows the number of days of care and the type of accommodation provided to "left employ" members; 33 plans provide 50 or more days of full or basic benefit.

In an earlier research and statistics note, tabulations corresponding to those in tables 1 to 4 for 1955 were given for Blue Cross plans for 1954. Little change was noted in the 12-month interim with respect to age limits on initial enrollment, whether group or nongroup; 1 plan formerly with no age limit on nongroup now puts age 65 as the limit, but 2 plans have abandoned a lower age limit in favor of age 65. Premium costs for "left employ" contracts have risen, as they have for group enrollment. Offsetting the increase in premium costs, however, are distinct improvements made by a number of plans in the number of days of benefits provided and/or in the dollar amount of daily benefit. Only 17 plans this year, in contrast to 23 a year ago, provide as little as 21 days of basic benefit; 14 of the 17 give additional days of partial benefit. Eight plans, compared with 5 a year ago, offer 90 or 120 days of basic benefit. Nineteen, instead of 17, provide 70 or 75 days of basic benefit (table 4).

Lack of information on the age of people enrolled in Blue Cross plans precludes an analysis in terms of the actual benefits available to older persons. Even though such data are not obtainable, it may be assumed that large plans in industrial areas have a large proportion of the older Blue Cross members included in their enrollment. Where these plans have a broad scale of benefits, many older persons undoubtedly have good protection against hospital costs. Where the general scale of Blue Cross benefits is not particularly good, older plan members will, even more than younger members of the plans, have less adequate protection.

TABLE 1.—*Number of Blue Cross plans, according to age limits for group and nongroup enrollment of adults, January 1956*

Age limit for initial enrollment	Group enrollment	Nongroup enrollment						
		Plan has no nongroup enrollment	Plan permits nongroup enrollment	Age limit for nongroup enrollment				
				No limit	55 to 56	60	65	66
Total	80	5	75	9	1	10	51	4
No age limit	[1] 51	1	50	9	----	6	32	3
Under 60	1	----	1	----	----	1	----	----
Under 65	[2] 27	4	22	----	1	3	19	----
Under 66	1	----	1	----	----	----	----	1

[1] Several of these plans have age limits on initial enrollment of dependents or sponsored dependents.
[2] For 2 plans the 65-year age limit applies only to groups of 10 or less; there is no age limit on larger groups. For another plan the age limit of 65 does not apply if the employer contributes to the premium.

TABLE 2.—*Number of Blue Cross plans distributed by annual premium rate for "left-employ" contract, January 1956*

Annual premium rate	1-person coverage	Family coverage	Annual premium rate	1-person coverage	Family coverage
Total	80	80	$48 to $53.99	----	12
			$54 to $59.99	[1] 2	13
$12 to $17.99	2	----	$60 to $65.99	----	12
$18 to $23.99	17	----	$66 to $71.99	----	10
$24 to $29.99	24	----	$72 to $77.99	----	13
$30 to $35.99	[1] 19	----	$78 to $83.99	----	4
$36 to $41.99	11	----	$84 to $89.99	----	4
$42 to $47.99	5	5	$90 and over	----	[2] 6

[1] Includes 1 plan covering hospital-surgical-medical.
[2] Includes 2 plans covering hospital-surgical-medical.

TABLE 3.—*Number of Blue Cross plans distributed by additional cost per year of "left-employ" contract over group contract* [1]

Additional annual cost of "left-employ" contract	Plans not reducing benefits		Plans reducing benefits	
	1-person coverage	Family coverage	1-person coverage	Family coverage
Total	57	57	23	23
No additional cost	1	1	1	1
Less than $3	8	4	2	5
$3 to $5.99	[2] 21	8	10	3
$6 to $8.99	[3] 15	[2 3] 12	5	4
$9 to $11.99	5	10	1	3
$12 to $14.99	7	15	1	3
$15 and over	0	7	[2] 3	[2] 4

[1] Based on comparable contracts as shown in Blue Cross Guide, January 1956. Where plans charged different rates for men and women (the female rate being higher), an average was used.
[2] 1 plan reduces benefit days for persons 65 years of age or over, whether under group or "left-employ" certificate.
[3] 1 plan reduces benefits for persons 70 years of age or over whether under group or "left-employ" contract.

TABLE 4.—*Benefit days available to "left-employ" members of 80 Blue Cross plans, 1956* [1]

Number of days of basic benefit [2]	Number of plans										
	Total	Type of basic benefit allowed					Days of additional partial benefits allowed [3]				
		Semi-private	Ward	Cash indemnity of			None	30, 35, 40, 45, 60, or 70 days	80, 90, 100, or 120 days	180 days	245, 295 days
				$5 to $7 per diem	$8 to $10 per diem	More than $10 per diem					
Total	80	38	7	12	19	4	51	6	16	5	2
21 days	[4] 17	12	2		2	1	3	3	7	4	
30, 31, or 35 days	[5] 30	12	2	8	6	2	22	2	6		
50, 60 days	6		[6] 1	1	4		5	1			
70 or 75 days	19	10	2	1	5	1	14		3	1	[7] 1
90 days	4	1		2	1		4				
120 days	4	3			1		3				[8] 1

[1] *General Note.*—In this analysis the most widely available contract (usually the plan's standard certificate) was selected if there was an option, since this contract was the only one usually available in the nongroup enrollment considered in other tables. Where there was a choice of per diem room and board allowance, the most favorable, i. e., the service benefit or the largest amount, was selected, in order to approximate the best contracts available to this population.

Plans that offer any of the following number of basic or additional days of benefit are usual: 21, 30, 70, or 90 days (indicated on table by underlining). Other numbers of days shown occur in not more than 3 plans (usually only 1 plan) in any cell in the table.

[2] The benefit may apply "per certificate year" or "per period of hospital confinement," and may include a deductible amount such as $25 paid by the patient or a cooperative payment of $2.50 paid by the patient for each day in the hospital.

[3] The most usual provision for the partial benefit is 50 percent of the basic benefit (16 plans) but other percentages are also used and dollar limits of $3, $4, $5, $6, and $10 are found.

[4] The basic days of benefit increases over this amount with each year of membership up to 3, 4, or 6 years (7 plans).

[5] For 4 of these plans, see footnote 4.

[6] This plan provides 50 days if under age 65; 30 days if 65 and over.

[7] This plan provides semiprivate hospital care for 70 days and an allowance of $10 a day for 295 days. Payment is made while in a nursing home, if patient is transferred directly from the hospital.

[8] This plan provides 245 days at $5 for persons under age 70, and a total of 20 days' care per certificate year for persons aged 70 and over.

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5. PROVISIONS OF BLUE SHIELD PLANS CONCERNING THE AGED [1]

NOTE.—A Blue Shield Plan is a medical-society sponsored plan which has also met the rules of Blue Shield Medical Care Plan. Such plans all provide surgery and some supply medical care ranging from limited to comprehensive coverage.

I. RESTRICTIONS ON INITIAL ENROLLMENT

Age limit for initial enrollment	Number of Blue Shield plans			
	Group enrollment		Nongroup enrollment	
	Number of plans	Percentage distribution	Number of plans	Percentage distribution
Total [1]	66	100.0	[2] 63	100.0
No age limit	39	59.1	7	11.1
Age 66	2	3.0	3	4.7
Age 65	24	36.4	45	71.7
Age 61			[3] 1	1.5
Age 60	1	1.5	6	9.5
Age 56			1	1.5

[1] Includes Blue Shield plans in Hawaii and Puerto Rico.
[2] 3 Blue Shield plans do not accept nongroup enrollments.
[3] After Dec. 31, 1956; prior age limit for this plan was 71.

II. TERMINATION OF COVERAGE

Only one Blue Shield plan terminates coverage after a certain age is reached, and this applies only to nongroup enrollees. This plan provides for membership for as many years after age 65 as the member was continuously enrolled prior to age 65. Since this plan's age limit for initial enrollment of such nongroup enrollees will be age 61 beginning with 1957, the minimum coverage after age 65 for such members automatically will be 4 years.

III. BENEFITS AND RATES OF PAYMENT

As long as already enrolled group members of one of the 66 Blue Shield plans remain paying members of the group, their rates of payment and benefit rights remain the same regardless of age. This is also true for the nongroup members in the 63 Blue Shield plans which accept such nongroup initial enrollments, except for the one plan which provides for termination of coverage based on age (see II above). Payment rates for nongroup members are higher than for group members.

Rates of payments and/or benefit rights, however, generally vary when an enrolled group member leaves his group and remains a member of the plan in a left-employ or group-conversion category.

[1] Based on information supplied by the National Association of Blue Shield Plans and summarized by Department of Health, Education, and Welfare.

Since these categories apply to any member leaving a group for any reason, they include younger as well as older persons (retirees). The provisions for such categories are summarized as follows:

Plans

	Number	Percentage distribution
Total	66	100.0
No change in rates or benefits	12	18.2
No change in benefits but rates are increased [1]	44	66.7
Benefits are reduced and rates are varied	10	15.1

[1] The median increase in family rates is about 18 percent.

6. MEETING MEDICAL COSTS FOR OLDER PEOPLE

William S. McNary, executive vice president, Michigan Hospital Service

Delivered at the Ninth Annual Conference on Aging, University of Michigan, Ann Arbor, July 9, 1956

I have been asked to discuss with you today the aged population group as it affects Michigan Hospital Service, the Blue Cross, and Michigan Medical Service, the Blue Shield plan. These two organizations, the hospital plan and the medical plan, work together very closely in Michigan. They have virtually the same membership, basically like policies, and the Blue Cross enrollment staff operates the enrollment program for both organizations.

I will confine most of my remarks to my own organization, Blue Cross, but please keep in mind that in enrollment policies and membership, what I say applies with few variations to Blue Shield.

The statistics which I will cite from Michigan Hospital Service were developed in part from sampling studies and in part from complete tabulations of data. The variations due to sampling are less than 2 percent.

Michigan Hospital Service has an enrollment of over 3,600,000 members, or slightly better than half the population of this State. This membership represents 2,200,000 adults, 20 years of age and over by our definition, and 1,400,000 dependent children under 20 years of age.

Since we are concerned here today with the aged I will confine my remarks and statistics to these 2,200,000 adult members. I will explain first how these people became members, how they have remained members, and I will outline their benefits.

Second, I will discuss the present number of members now over 65 and/or on retirement.

And, third, I will report briefly on the hospital utilization of the aged as compared with the general population.

First I would like to point out that the Blue Cross movement in Michigan, as well as in other sections and States, has developed as a community enterprise—as a nonprofit organization sponsored by the hospitals and doctors and directed by boards of trustees chosen from these professions and from the community at large. Because of this background we have made every effort to cover as many people as wish to join, with the fewest possible restrictions. Naturally there must be underwriting rules to prevent too adverse selection against the plans, but a primary objective is to make our service available to all.

In line with this philosophy, Blue Cross has no age limits on its membership. There is one exception to this which I will tell you about in a few minutes. With this same exception, subscribers and their families join through some form of group enrollment. Since this

method relieves us to a large extent from selection against the plan, we are able to offer these members a very comprehensive contract at minimal cost. Although there are a number of choices available under this comprehensive plan, the basic benefits are 120 days of hospital care (either ward or semiprivate, at the subscriber's choice) covering room and board and all hospital services and supplies with the exception of blood which normally can be obtained by the patient without cost.

The Blue Shield surgical certificate pays doctors of medicine and osteopaths according to a schedule of benefits for surgical, obstetrical, diagnostic X-ray, and anesthesia service rendered to hospital bed patients, or, in case of emergency, in an outpatient department or doctor's office. The medical-surgical certificate has these benefits plus payments to doctors for services to nonsurgical inpatients.

I mentioned a benefit schedule. Blue Shield offers the choice of either a $2,500 contract or a $5,000 contract—a larger fee being paid under the latter. Very important to most subscribers, but especially important to the aged, is the fact that participating physicians have agreed to take this fee as full payment for services covered by the contract if the patient's average family income does not exceed the stated amount; that is, either $2,500 or $5,000, depending on the contract, for a family and $2,000 or $3,750 for a single person. Thus, most retirees can feel confident of having a real "service" contract as against an "indemnity" type where the physician can charge over and above the insurance benefit.

The majority of subscribers (80 percent) are enrolled through their places of employment and may continue with group rates and benefits as long as they stay with their employer. We have no age limit and if they are not retired at 65 by their employer, they continue membership. We do not know how many people over 65 are so employed. Neither retirement nor termination of employment for any other reason means loss of coverage. The ex-employee can convert his and his family's coverage to a direct pay contract. Since this is at the ex-employee's option there is some selection against the plan. Therefore we limit care to 30 days per member, limit maternity benefits somewhat, and the cost is 10 percent greater than the group rate. This same provision applies to all regardless of age or reason for leaving employment.

We go much further than this for the retiree where an employer has a formal retirement plan. If certain conditions are met, we allow the retirees of a group to retain the same benefits and rate as may be maintained by the active group. These conditions are:

1. It must be a formal retirement program, in trust or funded.
2. The active employee group out of which the retired group is built shall have maintained a minimum of 75 percent enrollment for at least the last 2 years or since the inception of the group, whichever is the lesser. There is no percentage requirement for the retired section, only the active.
3. The custodian of the employee retirement fund shall agree to make deductions from the pension check much in the manner in which a company payroll office has the responsibility to make payroll deductions. Only employer-employee groups in which payroll and pension deductions are made are eligible for this program.

At the time such a retiree group is formed, all retirees of the group are usually allowed to join—no matter how long they have been retired. New retirees may elect to join at once. In either case if they wish to join they must do so at their first opportunity as there is no reopening for retirees.

The retiree is given the opportunity to "downgrade" his benefits and subscription charges. For instance, if he carries a comprehensive semiprivate hospital contract and a $5,000 medical-surgical contract while working, he may change to ward hospital care and the $2,500 surgical contract upon retirement.

At the present time, we have 159 groups with this coverage for retired personnel and their families. These groups cover over half of our entire adult membership. To be specific, they represent 1,101,395 active employees and their spouses, and 49,757 retired employees and spouses and in some cases other dependents.

We have many members on a group basis outside their place of employment. Most of these join through some type of association—such as a professional society or trade association. Here again, there is no age limit and a large percentage remain with this type of group beyond the normal retirement age found in industry. For example, we have 79,313 adults enrolled through either the Farm Bureau or Grange. Of these, 17,931 are now 65 or older. This is 22.6 percent of the group (in fact 10,344 or 13 percent are at least 70 years of age).

Annually, we open enrollment for a period of 2 to 3 weeks to all people who are unable to join Blue Cross and Blue Shield through a group. This is called our nongroup enrollment and is the one spot where an age limitation is placed. However, I think you will agree it is a liberal one. The only rules are that the subscriber must be under 65 at the time of enrollment, and that a married person must enroll his or her spouse. There is no age limit on the spouse; therefore, if either is under 65, both may join. Benefits are the same as for our direct pay members, those who continue individually after leaving a group, with three exceptions:

1. Instead of either a ward or semiprivate contract, a dollar amount is given for room and board—this is either $8 or $12 a day, at the subscriber's choice.
2. Pre-existing conditions and tonsil and adenoid removal for children are not covered for the first 6 months following enrollment.
3. The Blue Shield benefit is limited to the $2,500 surgical contract.

Rates for nongroup are low. In fact, the Blue Cross nongroup family rate with the $12-a-day room allowance is slightly under the comprehensive ward contract rate on a group basis.

At the present time we have 118,547 adults enrolled in nongroup. Of these 16,004 or 13.5 percent are now at least 65.

You will recall that our direct pay members are those who continue membership after leaving their group and who do not enter a retiree group program. At the present time, we have 189,144 adults in this classification of which 16,456 or 8.7 percent are 65 and over.

To summarize our present status: Out of 2,200,000 adult members, we know that 110,000 are in either retiree groups or over 65 on direct pay, nongroup, or other group enrollment. This is 5 percent of our total adult membership. I am told that slightly over 11 percent of

Michigan's adults are 65 and up. That our percentage is almost half of this, I feel shows a real effort to make care available to all.

Blue Cross began by enrolling industry—this meant the worker and his family. Our membership among older people was, therefore, very small in the beginning. It is growing and it is entirely foreseeable that we will soon have our full share of the 65-and-over population group.

Any present Blue Cross member may continue membership as long as he wishes. In fact, over two-thirds of the adults now enrolled may continue after 65 with the same benefits and rates as may be enjoyed by the active groups from which they came. As more retiree groups come in, this percentage will increase. All others may convert to direct pay upon leaving an active Blue Cross-Blue Shield group. No one is denied.

Thus, you can see that the Blue Cross movement is not ignoring the aged. Quite the contrary is true. We feel that they deserve membership on an equal basis with all others and most assuredly they need equal treatment—and that is what they receive. The enrollment restrictions we have are an attempt to guard against direct abuse and individual selection against us, by those who know they need the benefits immediately and they are not primarily aimed at any one group—such as the aged.

The average age of our membership is rising faster than is the average age of the general population. What does this trend mean to Blue Cross in terms of income and expenses? There can be no doubt but that it means greater utilization—a greater number of hospital days per member. But, what is the extent of this problem? Let us examine our experience with retiree groups.

Most of our retiree groups have had only 2 or 3 years of experience. This is not a long-enough period of time to show the picture accurately. Therefore, my remarks are not intended to show precise calculations, but rather to point out in general terms what may face us.

So far, our expense for the hospital care of retiree groups has been about 161 percent of our expense for their parent groups. By parent groups I mean the active employees, together with their families, working for those same 159 employers which have formed retiree groups. This figure of 161 percent is derived from a study of the experience of 35 of these 159 groups. These 35 groups have paid about $12 million in Blue Cross subscription charges during the 4 years ending December 31, 1954. Hospital charges per day average $17.39 for retirees against $22.19 for members of the active parent group. Hospital charges per case were $250.88 for retirees and $151.15 for actives. The same general tendency seems to be evidenced in Blue Shield costs. Blue Shield average cost per service for these same 35 groups of retirees amounted to $41.46 while for the parent groups the average cost per service was $34.71.

This greater cost is due primarily to the length of hospital stay among the older groups. The admission rate per member is quite comparable. It must be remembered here that about 20 percent of hospital admissions under Blue Cross are for maternity care. Naturally, retiree groups do not use the hospital to any extent for this purpose. Their greater use of the hospital for surgical and medical treatment seems to about equalize the loss of maternity admissions—making the overall admission rate the same.

However, the average length of stay per case for those in our retiree groups runs 14.4 days—or just about twice the average for the plan as a whole.

It is interesting to note that a study [1] made by the Social Security Administration in 1952 found that utilization by the noninstitutional aged population was 106 percent higher than utilization by the general population. The survey also found that the hospital admission rate for the 65 years-and-over group without prepaid hospitalization was 60 percent of that for those over 65 who had hospital insurance. However, the average length of stay was very much longer for the noncovered group—being 27 days per admission as against 14.7 days for the covered group. This latter figure certainly conforms to our own experience of 14.4 days per case. It seems obvious from this report that the noncovered aged group need more hospital care than they receive and that once forced into the hospital, it is for a major cause of prolonged duration.

If we assume that (1) those over 65 have at least twice the utilization of the general public, (2) 5 percent of Blue Cross adults are now at least 65, and (3) we will eventually have more than 10 percent of our adults over 65, then we can see an overall increase in utilization of from 5 to 7 percent from this cause. Some of this may be overcome in the future by making use of convalescent homes and outside nursing care in certain cases.

There is another important point regarding the aged and hospitalization coverage. This is "the ability to pay." I believe our present arrangement for retiree groups goes a long way to help solve this problem. To push this development was one of the two major recommendations for covering the aged made by the commission on financing of hospital care—of which I had the honor to be a member. The other recommendation was the inclusion of a provision in the Federal Old Age and Survivors Insurance program for hospitalization protection for needy beneficiaries receiving monthly income-maintenance benefits under this program, provided—

(*a*) That the certification and administration of funds for hospital benefits be the responsibility of State and local agencies, and

(*b*) That the protection be provided by the local administering agency through purchase of voluntary prepayment from OASI funds or by direct payments to hospitals on a reimbursable cost basis from such funds.

All of the experience I have referred to so far comes from the Michigan Blue Cross and Blue Shield plans. I have also some limited data which was developed by a joint American Hospital Association-Blue Cross Commission committee from data submitted by 14 Blue Cross plans located in various parts of the United States. This data is much less favorable in terms of utilization by the aged than the Michigan experience.

According to the national study, adults from 20 to 64 years of age use approximately 1,035 days of hospital care per thousand members. This figure includes routine obstetrical care. Blue Cross members 65 years and over used approximately 2,800 days per thousand members. It was the conclusion of the committee that the excess hospitalization for ages 65 and over, as measured in days of hospitalization,

[1] Source: I. S. Falk and A. W. Brewster: Hospitalization and Insurance Among Aged Persons, a Study Based on a Census Survey in March 1952. Department of Health, Education, and Welfare, Social Security Administration, Bureau Report No. 18, Washington, April 1953.

might run as high as 2½ days per person per year or possibly slightly more. The committee's conclusion was that the cost of this care for persons 65 and over would be nearly three times the cost of hospital care for those under 65. It seems to me that this latter conclusion fails to take into consideration the lower average daily hospital cost for the older people. Based on the data available to the committee, it would seem to me that the committee's estimates are on the high side, but that may be wishful thinking.

The 14 plans participating in the national study reported percentages of persons over 65 from a low of 2.3 percent to a high of 11.2 percent in group remittance and group conversion membership. Group remittance alone varied from 1.8 percent to 6.9 percent adults over 65. The group conversion category varied from a low of 5.2 percent to a high of 23.9 percent adults over 65. The average would appear to be about the same as Michigan or slightly higher. Under the nongroup category, the variations are greater. One plan reported 43.2 percent of its nongroup adults in the over 65 group.

As times goes on, we will have much more complete and more accurate data regarding the utilization of hospital and medical care by the aged. In my judgment, it is terribly important to the voluntary hospitals and to the present voluntary health care system to solve this problem. The fact is that older people need more medical care than young people. It does not answer the problem to provide fewer benefits at a higher cost to the individual at a time when his needs increase and his income is probably less. We think in Michigan Blue Cross and Blue Shield that we have taken an important step forward by making group benefits available at group rates to retired Michigan workers.

7. MEETING THE MEDICAL COSTS OF OLDER PEOPLE WITH COOPERATIVE PLANS

Robert E. Van Goor, general manager, Cooperative Health Federation of America, Chicago, Ill.

Delivered at the University of Michigan conference on aging, July 10, 1956

The Cooperative Health Federation of America is an association of prepaid group-health plans (and other organizations sympathetic to this movement) in the United States and Canada. Some 30 of its member organizations are health insurance and direct-service-health plans sponsored by consumer, community, labor, and rural groups. All are dedicated to enabling people to gain access, by their own efforts and at reasonable cost, to high quality health care which modern medical science makes possible.

Much of the following information was received in answer to a letter sent 11 Cooperative Health Federation of America member plans in the United States, representative of Cooperative Health Federation of America's health-plan membership. Not much statistical information is available from these plans on members over age 65. Other kinds of information were submitted which I think should be helpful when considering how best to meet and finance the health needs of older people.

COOPERATIVE HEALTH INSURANCE PLANS

Three of the eleven Cooperative Health Federation of America member organizations contacted are cooperative cash-indemnity health-insurance plans having a number of members in rural areas of States in the Northwestern, North Central, and Northeastern parts of the United States. These plans provide medical-surgical-hospital coverage for over-age-65 members of groups at the same premium rates and eligibility requirements as for under-age-65 members of the group. Two of the plans provide major medical expense insurance to all members of a group.

One of the plans has worked out agreements with several hospitals and with doctors in rural areas to accept its fee schedule, regardless of the member's age, as payment in full for services rendered. Two of the plans have developed rural-group coverage for all persons, regardless of age, through countywide farm organizations and cooperative creameries. The other plan, with no age limit whatever, has actually sought individual family memberships rather than group memberships.

All three cooperative-insurance plans surveyed provide coverage for over-age-65 persons through individual policies, too, but with varying degrees of benefit limitations and higher monthly premiums. All three reported higher claims costs for their over-age-65 members.

Two of these three insurance plans have a limited health-education

program for members, but it is not geared specifically for older persons. One plan publishes a bimonthly magazine; the other sponsors a bimonthly TV program in the area where its members live.

AMBULATORY PLANS

Two of the 11 CHFA member health plans contacted are union-sponsored plans, providing through their own clinics direct health services to ambulatory patients, including retired persons over age 65. One plan serves both members and dependents; the other, the union member and his wife. One of the plans has maintained active contact with community agencies, both public and voluntary, through which additional services are available to supplement the clinic's services. Cash indemnity hospital and surgical coverage is paid for out of the unions' health and welfare funds. From April 1955 through March 1956, 19.6 percent of new patients registered at one of the union-sponsored ambulatory plans were over 60 years of age. Both plans carry general articles on health education in their regular publications.

Upon retirement, the clinics' services are still available, with either the union or member paying a very modest annual premium.

A retired member evaluated the direct service ambulatory clinic as "* * * one of the finest achievements of the union."

COMPREHENSIVE DIRECT-SERVICE PLANS

The remaining six plans surveyed provide direct medical and surgical services to their members. Four of the six also provide hospital benefits; three have their own hospitals. Members of the final two plans receive hospital benefits from another health plan, often Blue Cross. None of the six plans make cash indemnity insurance payments to members utilizing any of the benefits. Instead, their members receive, regardless of age, comprehensive—preventive and curative—health services of high quality through prepaid group medical practice, with the consumer members having a voice in determining economic policy of the plan and the medical staff controlling the practice of medicine.

There are relatively few extra charges, so that a member need not hesitate, because of a dollar barrier, to see his doctor whenever he needs him.

One plan even provides restorative and maintenance-care dentistry. Three have out-of-service-area benefits for members taken ill or injured away from home. Visiting-nurse services are provided by two of the comprehensive direct-service plans.

Two of the plans do not accept as individual members persons over age 65. One accepts individual members over age 60, but with reduced benefits. All accept members in groups, regardless of age. Two of the plans accept only groups. All six comprehensive direct-service plans issue noncancellable policies, accept conversions from group to individual membership without penalty, and continue coverage for retired persons without reducing benefits or increasing rates.

The six comprehensive plans surveyed provide services to approximately 580,000 people. Four plans are in large cities, two in small towns. Four are sponsored by cooperatives, 1 by a labor union, and 1 is a community-type plan.

Premium rates for comprehensive medical-surgical-hospital care for husband and wife over age 65 in direct-service plans range from $90 to $150 per year, depending in large measure where the plan is located. A 1954 survey of self-supporting retired persons over age 65 in New York City showed a man and wife budgeted $156 a year for health care; single persons living alone, $70.20.

Percentage of members over age 65 in the 6 plans ranges from a low of 1.5 percent in the larger plans to a high of 22 percent in the smaller ones. The highest percentage is in a rural plan.

Utilization statistics show that, in 1954, the largest direct-service plan surveyed rendered 7.6 services to over-age-65 males, 6.5 services to over-age-65 females, 4.7 services to all males, and 5.5 services to all females. In 1953, the second largest plan had similar figures: 7.4 services to over-age-65 males, 6.9 services to over-age-65 females, 4.8 services to all males, and 6.4 services to all females. The latter plan assigned a given dollar value to each service (which does not represent service cost). It found that the 7.2 services rendered per individual over age 65 had a service value of $7.07 per service; 5.61 services per individual, regardless of age, had a service value of $8.15 per service.

A survey made several years ago by the largest of the 6 plans indicated general physicians rendered 60 percent of the services members over age 50 received; specialists rendered 40 percent of the services. Physicians saw their patients at the office, 79.4 percent; at the patient's home, 6.6 percent; and in the hospital, 14 percent. The surveys' authors stated that the total physicians' services used by these older people are certainly not so excessive as to constitute a serious burden upon the plan or its physicians.

The executive director of one of the larger direct service plans said the percentage of members over age 65 hospitalized in general hospitals is about the same as for under age 65 members in their plan, but the length of hospital stay is longer. The medical director of another surveyed direct service plan said the use of general hospital beds for convalescent and nursing home care is one of the main problems in caring for the aged. Direct service health plans can provide comprehensive medical-surgical-general hospital care for members over age 65, he said, but the plans need help to meet the demands for care in other than general hospitals.

The rural plan contacted in the survey is using part of its hospital for nursing care now. Another plan is considering the use of nursing home beds. And after the completion of its new facilities next year, the smallest plan will use its present hospital for a nursing and convalescent home and rehabilitation center. To make better use of public and voluntary community agencies, one direct service plan has prepared a Guide to Community Resources for its staff to use in referring members to agencies providing services not available from the plan. This kind of information is especially helpful where communities have organized services to meet at least some of the health needs of over age 65 persons not met by the health plan itself.

Health education, emphasizing the value of preventive medicine and early diagnosis and detection of disease, is a vital part of the program of all six direct service plans surveyed. They use their regular publications and regularly scheduled meetings to reach members plus using personal contacts between staff physicians and patients.

Three of the plans have health educators on the staff. One administrator said chronic disease is detected earlier in the members who use the clinic's facilities regularly than in members and nonmembers who use the facilities only occasionally. In practicing preventive medicine, direct service health plan doctors do their best to detect signs of disease before it becomes serious and expensive. Health education for the older patient is necessary if he is to cooperate with his doctor in the practice of preventive medicine.

CONCLUSIONS AND SUGGESTIONS

Health needs of persons over age 65 should be viewed in the context of their health needs over a lifetime and in the context of the environment in which persons over age 65 live. Other workshops are dealing with environmental factors.

Prepaid nonprofit direct service health plans have demonstrated thus far that it is possible to provide comprehensive—preventive and curative—health services of high quality at reasonable cost to persons both under and over age 65. They have enabled doctors working as a team through group practice to render high quality health services. They have enabled doctors and laymen working together to exercise some control over health care costs. Doctors are paid on a salary, capitation, or hourly basis, thus avoiding the expensive procedure of a fee for every kind of service rendered. These plans have emphasized preventive medicine—the positive promotion of health, early diagnosis and detection of disease—as well as treatment of illness.

Direct service plans pay doctors to keep the members well, and if possible out of the hospital. Here is budgeting for health services with no dollar barrier to stop the patient, young or old, from seeing his doctor, and with very few extra costs for members to meet.

To be added to these comprehensive medical-surgical services are hospital benefits provided by nonprofit prepaid hospital service plans. This type of hospital plan, recognizing the potential in direct service medical-surgical plans to keep people healthy and out of hospitals, ought to be willing to offer lower premium rates to members of direct service health plans.

One high-ranking cooperative insurance company executive has said:

> After considerable study, we are satisfied that consumer plans for prepaid comprehensive medical care effectively meet the needs of consumer groups, reduce the financial burdens of illness, increase the utilization of medical services so as to fill adequately the health needs of the insured population, improve the scope and quality of medical care and promote disease prevention and early detection. Consequently, we have undertaken to discover and to study the various ways in which we may assist the development of such plans.

One way would be to combine hospital service benefits with direct medical-surgical benefits. Prepaid nursing and convalescent home service benefits are worthy of consideration, I think, in order to reduce the utilization and cost of expensive general hospital beds often occupied unnecessarily by over age 65 persons. A second way would be to finance the constructing or acquiring and equipping of medical care facilities needed by direct service plans.

Another cooperative health insurance organization, a charter member and staunch supporter of the Cooperative Health Federation of America for many years, has recently financed in its new office building facilities for a comprehensive direct service medical-surgical plan. Its own hospital plan will be available to members of the direct service plan.

The combination of a nonprofit direct service medical-surgical plan and nonprofit hospital plan would appear to be one of the best mechanisms for providing high quality comprehensive health care at reasonable cost to many people, including those over age 65.

Trying to meet the health needs of the aged is a challenging new field requiring very careful study and experimentation. The Cooperative Health Federation of America stands for the right and duty of the people to take the initiative to experiment in solving their health problems. It is therefore respectfully suggested that the following proposals ought to be tried:[1]

1. Federal long-term, low-interest-bearing loans be made available to help start consumer-controlled, nonprofit comprehensive, direct service medical-surgical health plans; restrictive State legislation against these plans be repealed; and medical society discrimination against doctors who participate in prepaid group practice direct service health plans be removed.

2. Because many aged persons cannot pay the full premium for adequate health care, Federal-State grants be made to help pay premiums for over age 65 persons who are members of nonprofit medical-surgical-hospital plans.

3. Consideration be given to payment of health plan premiums for over age 65 persons through the old-age and survivors insurance program.

4. Retirement programs be expanded to include payment of health plan premiums for retirees, and their dependents.

5. Urge health insurance plans to include under group contracts for family coverage at an appropriate premium aged adult dependents as defined under the income tax exemption provisions.

6. Encourage greater use of the 1954 amendments to the Hill-Burton Act to construct public and nonprofit diagnostic or treatment centers, chronic disease hospitals, rehabilitation facilities, and nursing homes.

7. Federal-State grants be made for research in gerontology, and to finance demonstrations in various methods of providing health care for the aged, and to train more persons to serve the health needs of the aged.

8. Community programs, public and voluntary, be developed and expanded to supplement the services of nonprofit comprehensive health service plans to over age 65 members, particularly home care and institutional care programs.

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[1] On August 24, 1956, the annual meeting of the Cooperative Health Federation adopted a resolution on Federal aid to group practice which is broader than this proposal. The resolution reads as follows:

"*Be it resolved,* That the CHFA reaffirm its support of enactment by Congress of legislation providing for direct Federal grants and long-term, low-interest loans and/or federally guaranteed private loans for construction and equipment of facilities for the group practice of medicine; and be it further

"*Resolved,* That the membership of this organization and friends of the program make a particular effort to contact their Senators and Congressmen urging them to support this most important legislation."

8. HEALTH PROGRAMS FOR CALIFORNIA'S SENIOR CITIZENS [1]

Louis Kuplan, executive secretary, Citizens Advisory Committee on Aging, State of California

The mounting interest in California in the problems of aging pays tribute to the desire of our citizens and communities to work actively and effectively toward the solution of these problems. It is also an index of the effectiveness of State departments and agencies in furnishing technical guidance and encouragement to the local communities. There are now some 70 communities throughout the State which have citizen groups actively engaged in developing and operating programs for older persons. This number does not include the hundreds of "golden age" and other senior clubs. These groups are engaged in a variety of activities which include housing, health, employment, counseling, day centers, recreation, education, and services to the community by the senior citizens.

The major impetus for virtually all of this activity came from the governor's conference on the problems of aging held in 1951 and which was attended by more than 2,500 persons who came from all parts of California and from every walk of life. They represented almost every profession, labor, management, lay persons as well as the senior citizens. From this conference emerged the principle that the citizen in his own community had the primary responsibility for meeting these problems. This principle, which was enunciated clearly and sharply, also stated that the State government had the responsibility to help the local community by providing technical guidance, but not to do the job itself. Obviously the citizens of California meant what they said for they went home, rolled up their sleeves and set to work. The result has been that no other State can boast of as much local activity as can California.

STATE COMMITTEES

To provide the technical guidance and stimulation required by the local communities the Governor of California, at that time Earl Warren, established the Interdepartmental Coordinating Committee on Aging composed of the directors of the State departments of education, employment, industrial relations, mental hygiene, personnel, public health, recreation, social welfare, and veterans' affairs. The Governor's departmental secretary was also designated as a member of the committee.

Goodwin J. Knight, when he became Governor of California, expressed his belief in the importance of local participation in this work by asking the Interdepartmental Coordinating Committee on Aging to continue its work. Governor Knight was able to go a step further in strengthening State and local cooperation in this work. At his request

[1] From California's Health, July 1, 1956.

the 1955 session of the California Legislature enacted legislation which established a Citizens Advisory Committee on Aging. The 1956 special session of the legislature clarified a number of technical details in this law. Governor Knight has already appointed the members of this new committee. The two committees will complement each other and work together closely in their efforts to cooperate with local communities in attacking and solving the complex problems of aging.

HEALTH PROGRAMS

Health in the later years is one of the major problems of aging. This includes not only the maintenance of good health but also the treatment of the many chronic ailments which appear to be emphasized by our increasing longevity. Interest in the health aspects of aging has manifested itself in more ways than can be reported on in a short paper. Some of the major activities are reported here.

Perhaps the logical starting point is emphasis on education in the maintenance and understanding of good health in the later years. In this area there has been successful collaboration among State agencies, local committees on aging, and local adult education programs. Among the first to get under way were Sacramento and Los Angeles. In Sacramento the Committee on Aging and the Adult Education Center, as part of a long range course on "retirement readiness," offered a series of five lectures on physical health in the later years. With the cooperation of the Sacramento Society for Medical Improvement which furnished physicians as the lecturers, the program offered such subjects as physical changes in the aging process, nutrition, circulatory diseases and chronic ailments. In Los Angeles, similar lecture series have been offered successfully at a number of evening high schools. Lectures on mental health of older persons have also been offered in both cities. Many other California cities have since followed with similar lecture series.

A highly interesting experiment in health education is under way in West Los Angeles. There the Los Angeles City Health Department and the West Los Angeles Community Council for Senior Citizens are jointly offering a biweekly program which brings medical experts to speak on health in the later years. The subjects for discussion were determined through an interest survey of senior citizens. In order of expressed interest these are rheumatism, arthritis, eye problems, heart disease, blood pressure, mental health, hearing, cancer, and a number of other health problems. Local physicians and representatives of voluntary health agencies do the lecturing.

Adequate nutrition has also been found to be a major health problem of older people. This may be due to two factors primarily. One is the reduced income which comes with retirement. Because of the lack of knowledge inadequate and improper substitutions are made for the more expensive protein foods such as meat. The other factor is that older people who live alone are likely to skimp on the preparation of food because of their dislike for solitary dining. Efforts to educate older people to the importance of good diet are increasing. In Sacramento the Committee on Aging and the American Red Cross sponsored a workshop on nutrition which featured proper food preparation for older persons. In West Los Angeles the Los Angeles City Health Department's nutritionist is offering a monthly demonstration

for senior citizens showing how easy it is to prepare tasty, nutritious, and economical meals. At the request of the Interdepartmental Coordinating Committee on Aging, the State's Interagency Committee on Nutrition is preparing leaflets for older people on food needs, menu planning, and marketing tips. These leaflets will be given widespread distribution. The State Department of Social Welfare has recently revised its regulations for institutions for the aged in which considerable attention has been given to the food needs of residents in these facilities. To supplement these regulations the department has published a cook book which gathers together some of the best recipes from the institutions. These recipes are accompanied by data on cost per serving as well as the food values and caloric content of each serving.

The State Department of Public Health is now sending a quarterly leaflet, Nutrition Service Series for Nursing Homes, to all operators of nursing homes licensed by the department. These leaflets have discussed food needs, supper menus, menu planning, and sodium restricted diets. Nutrition consultants have met with senior citizen groups to discuss food needs and problems and have participated in workshops for operators of nursing homes.

It is encouraging to note that the medical societies of the State are showing great interest in the health problems of older persons. Many of them have established their own committees on aging to facilitate cooperation with general community committees on aging. The California Academy of General Practice has had such a committee for about 3 years. It has worked closely with the State's interdepartmental coordinating committee and has issued useful and interesting reports to its members. The Alameda-Contra Costa County Medical Association's Senior Citizens Committee has developed a school for the relatives of older patients. Here evening seminars are offered, without charge, to persons referred by their family physicians. Emphasis is placed upon instructing relatives in how to care for older persons in their homes. At its last annual meeting the Los Angeles County Medical Association offered a panel discussion on the care of the geriatric patient which featured nationally named experts.

At its major meeting in 1954 the Redwood chapter of the California League for Nursing devoted the entire session to the health problems of the older person. The Western Gerontological Society at its first two meetings offered discussion panels and papers on similar problems.

In meeting the health needs of older people, nursing and boarding homes play a major role. Many community committees on aging have sponsored 1-day workshops for operators of such facilities where physicians and nurses have led discussions on the health care of their patients and guests. Successful meetings have been held in San Diego, Sacramento, Glendale, and San Francisco Bay area. The result has been that the operators are requesting more opportunities to learn how to improve the quality of the care they offer. A significant development in this area has been the course now in progress in Santa Barbara. The local committee on aging and the adult education center are cosponsoring a series of lectures for operators of nursing and boarding homes. Lectures include the topics of physical health, mental health, and nutrition. In addition to its sponsorship and participation in workshops for operators of nursing homes, the State

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department of public health provides consultation to the operators on recordkeeping, patient care, and other operational activities.

Other organizations are also working actively and effectively to educate their communities to an understanding of the importance of good health and adequate medical care for the senior citizen. In San Francisco the chronic illness center has found that the major part of its work is with older people. It is developing a program of referral to other community agencies for care and services. It has also sponsored training meetings for operators of nursing and boarding homes caring for older persons. There has also been developed in San Francisco a home care program which will have much to do with older patients. This program is under the medical direction of Dr. Edgar J. Munter who has long been identified with care for the long-term patient. In Los Angeles a committee established by the Welfare Planning Council of Los Angeles has been studying many problems of the aging for the past year. Its first report, just released, is concerned with the health of Los Angeles' senior citizens. It has recommended specific measures to safeguard the health of recipients of old-age assistance.

A major demonstration project is underway in Santa Cruz County with the guidance and encouragement of the State department of public health. The county health officer is concerned with the incidence of illness among recipients of old-age assistance. He believes that early diagnosis will help prevent chronic illness and reduce the cost of medical care. He has, with the approval of the Santa Cruz County Board of Supervisors, established a diagnostic clinic which is being well received. It is too early to determine its full effectiveness.

PROFESSIONAL EDUCATION

The California Conference of Social Work has long been concerned with general health needs. At its annual meeting in Long Beach in May of this year considerable attention was focused on the health needs of older persons. Five out of nine meetings of the section on aging were devoted to the subject of health. The Santa Clara County Health Council has just inaugurated a lecture series which will lead to a program offering needed medical care to the county's older residents.

One of the most exciting and hopeful events in the area of health occurred during the month of May. This was the state-wide lecture tour of Dr. Lionel Z. Cosin. Dr. Cosin is the clinical director of the geriatric unit of the United Oxford Hospitals of Oxford, England. He has won considerable international renown for his work in rehabilitating the chronically ill older person. The State's interdepartmental coordinating committee on aging obtained a foundation grant which enabled it to bring Dr. Cosin to California. He addressed the annual conventions of the California Medical Association, the California Conference of Local Health Officers and the California Conference of Social Work. Dr. Cosin also lectured at the medical schools of the Universities of California, Southern California, and Stanford, and at the Kaiser Health Foundation. Addresses were also made at meetings for the general public at Little House in Menlo Park and at the annual lunch meeting of the Sacramento Community Welfare Council. Of major importance were the two meetings, one in northern California

and the other in southern California, for administrators, physicians, nurses and physical therapists of county hospitals and county supervisors. These last two meetings were cosponsored by the County Supervisors' Association of California, the California Hospital Association and the State department of public health.

The great enthusiasm with which Dr. Cosin's talks on rehabilitation in geriatrics was received augurs well for the development of an effective program in this major health area. Plans are under way for a program which will follow up on Dr. Cosin's talks and provide California with a continuing program of training in the rehabilitation of older, chronically ill persons.[2] Two county hospitals demonstrated that they have already made good starts towards this end. They are Fairmont Hospital in Alameda County and Rancho Los Amigos in Los Angeles County. There are indications that several other hospitals are under way; among them are Edgemor Farm in San Diego County, Laguna Honda in San Francisco, and the Contra Costa County Hospital.

HOUSING

There are a number of other programs for California's aging persons which have a relationship to the individual's health. The matter of decent housing is one of them. Safe and healthful living arrangements loom large in the preservation of health. Yet because of their disadvantaged economic conditions an inordinate number of our senior citizens live in housing that falls well below the minimum standards for health and safety. To improve this situation a number of California communities have demonstrated that good housing for retired persons can be provided at reasonable costs. The Santa Barbara American Women's Voluntary Services has shown that it is possible to finance such an undertaking in a small city. It has built a project with 25 apartments designed to meet the needs of older couples and individuals yet retain beauty and desirability at rentals possible for recipients of public assistance. At La Jolla another voluntary group, the Social Service League, has built an apartment house of 15 units designed for retired people of limited incomes which are slightly higher than those of the Santa Barbara project residents. It too is a most attractive setup. In Menlo Park a group of senior citizens are working on a plan to provide good, attractive, inexpensive housing for themselves. They have interested local business and professional people to the extent that the latter have formed an advisory board to help the oldsters with their financial and legal problems.

The San Francisco Housing Authority plans to break ground soon for one of the most advanced low rent housing projects for older people in the country. There will be close to 200 apartments for both single and double occupancy. Facilities will be provided for social and craft activities for the residents. Also in San Francisco is an experimental housing project for older persons which is sponsored by the Jewish Family Service Agency. Here, for a very reasonable cost older people may rent apartments. Included in the rent is one hot meal a day. All of the projects mentioned above are centrally located; there is no attempt made to segregate the oldsters. On the contrary every effort is made to keep them integrated into the ongoing life of the community and neighborhood.

[2] California's Health plans to publish a paper by Dr. Cosin in a future issue.

RECREATION AND EDUCATION

It is becoming more generally recognized that meaningful and satisfying activity is closely related to the physical and mental health of all people regardless of age. Yet our social and cultural patterns are such that we arbitrarily retire people at 65 years of age and thereby condemn them to inactivity. This practice is all the more unrealistic when we realize that today most people are in good physical and mental health at 65. But arbitrary retirement based solely on chronological age is a factor leading to physical and mental deterioration. Therefore many of our communities are providing opportunities for the retired to remain as active as possible commensurate with their capacities. One such outlet is in the area of recreation. More than 100 recreation districts in California now offer activity programs for older persons, usually beginning at 50 years of age. These programs provide opportunities for normal social contacts and arts and crafts which have meaning to the individual and which provide him with outlets for his creative urges. There are day centers such as at Little House in Menlo Park and the four branches of the San Francisco Senior Center where older people engage in a host of satisfying activities. These centers also give older people an opportunity to be of service to their communities in many ways—as in united crusade drives, volunteers for the Red Cross and other voluntary agencies, civil defense and visiting their contemporaries who are bedridden in their own homes or in hospitals and institutions. It has been found that oldsters miss the opportunity of doing things for others—they do not want to be on the receiving end only. Such programs permit them to retain their sense of responsibility.

Finally, there is the preventive aspect of education. We know now that the old adage "You can't teach an old dog new tricks" is false. Rather it becomes a matter of "You can't teach an old dog new tricks if he won't learn." We find today that more and more older people are returning to our schools and colleges to complete their formal educations and to study all kinds of subjects just for the fun of it. Last year some 200,000 persons over 50 years of age were enrolled in classes offered in California adult education centers. It would seem that recreation and education programs keep oldsters too busy and contented to deteriorate physically and mentally. Certainly such programs are far less expensive in terms of human lives and the taxpayers' money than hospital care.

THE FUTURE

While it may appear that this paper reports great activity in California, it is generally conceded that we have only barely scratched the surface. There is urgent need to expand our health and activity programs so that they meet the needs of all older Californians. There are today well over 1 million past the age of 65 in California. The number increases greatly if we think in terms of 40 years of age as the critical age for health preservation. The urgency for the rapid development of the needed programs is highlighted by the fact that there is a net annual increase in the number of persons 65 years of age or more, in California of 40,000 each year—an increase which is not due to in-migration of oldsters as many believe.

By developing preventive and diagnostic health programs for older people as well as providing them with meaningful activities we can avert real trouble in the next decade. If we permit the problems to pile up without planning they can become insurmountable. If we go to work on them now we can solve most of them. The citizens of California have shown that with a little encouragement they will face up to their problems. We are already in the vanguard nationally in working on these problems. If there is the necessary professional guidance and stimulation we can show the country that California has the know-how, the ability, and the leadership to solve the most difficult social problem now facing us.

SECTION B. HOSPITAL CARE

9. INCAPACITY AND HOSPITAL CARE OF AGED BENEFICIARIES OF OLD-AGE AND SURVIVORS INSURANCE [1]

By Dorothy McCamman and Agnes W. Brewster, Division of Research and Statistics, Office of the Commissioner, Social Security Administration, Department of Health, Education, and Welfare

In the national survey of the economic resources of aged beneficiaries made by the Bureau of Old-Age and Survivors Insurance in 1951, beneficiaries were asked how many weeks they had spent in the hospital or had been confined to bed at home during the survey year. The answers to these questions are analyzed here, in relation to such factors as age, sex, and ownership of voluntary insurance against hospital costs

It is common knowledge that the aging process is accompanied by a slowing down in physical capacity. Little information has been available, however, to indicate the extent to which this slowing down results in incapacity that confines the individual to bed. Studies have shown that the hospital days per year per aged person are about double the average for younger adults. But are these longer hospital stays of older persons accompanied by substantial periods of confinement to bed at home? How are their hospitalization rates affected by income and by ownership of insurance protection against these costs or by living arrangements? These are among the questions that can now be answered for a particular group of aged persons by data collected in the 1951 national survey of aged beneficiaries.

SURVEY PROCEDURES

Answers to the questions about incapacity are necessarily subject to important overall qualifications arising out of the survey procedures. Because the survey was designed to permit an analysis of income and assets for a situation existing throughout the year, adjustment of the sample was necessary for deaths or long-term hospitalization during the survey year. These adjustments—sometimes an outright discard of the case from the sample and sometimes an arbitrary classification of the beneficiary type—are summarized here because of their important influence on the subsequent analysis of incapacity.

Beneficiaries who died during the year were not covered by the survey, and therefore all these data on incapacity exclude terminal illnesses. The survey was made from a 1-percent random sample of old-age beneficiaries and widows whose benefits were in force in December 1950. There were 22,384 cases in the sample, from which 4,719 were discarded. Of these, 1,603 were discarded because of the death of the old-age beneficiary or the aged widow before the date of the interview or because of the death of the spouse during the survey year.[2]

[1] From Social Security Bulletin (July 1955), pp. 3–10.

[2] A detailed study of the mortality rates under old-age and survivors insurance and other public and private pension programs shows that "in the absence of any special circumstances, the mortality rates for voluntarily retired workers during the first year or two of retirement are considerably higher than the general level that otherwise might be expected but that they thereafter merge with that level." (Robert J. Myers, "Mortality After Retirement," Social Security Bulletin, June 1954.)

When the old-age beneficiary's wife died during the survey year, one of several special procedures was used, depending on the time of death. If death occurred near the close of the survey year (within 3 weeks and 6 days of the year's end), the case was classified as a couple during the entire year. If it took place near the start of the survey year (within 3 weeks and 6 days of the beginning), the case was classified as a nonmarried man during the entire year, and no information has been included about the wife. If the wife's death occurred at any other time within the year, the case was discarded from the sample as it constituted a change in beneficiary type.

Similarly, special procedures were used when one member of a couple had been hospitalized or in an institution for 4 weeks or more during the survey year. The procedures had the same result whether the old-age beneficiary drawn in the sample was the male or female member of the couple but, for simplification, are described only for cases in which the husband was the member drawn. When the male old-age beneficiary had been in a hospital or institution for as long as 48 weeks the case was classified as a nonmarried man, and information on the wife was not included. If the old-age beneficiary had been in an institution for hospitalized for as long as 4 weeks but not so long as 48 weeks, the case was classified as a couple, provided the wife managed the finances during the husband's absence. If she did not handle the finances, the case was discarded to avoid a change in beneficiary type during the survey year. Actually there were relatively few discards of this type.

When the wife was hospitalized or in an institution for as long as 48 weeks, the old-age beneficiary was treated as nonmarried. If the wife's period of absence was as long as 4 weeks but less than 48, and she was in a publicly financed institution, the case was discarded, again because a change in beneficiary type would have been involved. If, on the other hand, she had been in a private institution and the husband had paid for 50 percent or more of her support (actually, if he had been billed for her charges), the case was classified as a couple throughout the year.

Obviously, these survey procedures cut down the measured incapacity rate below that actually experienced by aged beneficiaries of old-age and survivors insurance. In addition to discards because of death, there were 299 cases that had to be discarded because the beneficiary was in an institution or was incompetent or too ill to be interviewed and had no spouse from whom the information could be obtained.

The survey procedures also make meaningless some of the conclusions that might be drawn concerning the beneficiary types. The data show, for example, that the rate of institutionalization was especially high among nonmarried men. The immediate conclusion would be that such beneficiaries are more apt to require institutional care because there is no wife to provide home care. The system of discards and of classification of beneficiary type by its very nature, however, resulted in a concentration of long-term institutionalization among beneficiaries classified as nonmarried men. For this reason, the ensuing analysis largely ignores the classification by beneficiary

type that had been assigned primarily for the purpose of studying the income and resources of the beneficiary group.

TABLE 1.—*Percent of aged beneficiaries reporting no incapacity [1] during survey year 1951, by sex and age, at end of survey year and by ownership of hospitalization insurance*

Age and sex	Total	With insurance	Without insurance	Age and sex	Total	With insurance	Without insurance
All aged beneficiaries	69.3	70.9	68.8	Men—Continued			
Under 70	70.8	72.0	70.3	75 to 79	69.9	68.8	70.1
70 to 74	69.3	71.9	68.6	80 and over	68.1	68.1	68.1
75 to 79	67.8	67.4	67.9	Women	66.5	67.9	66.1
80 and over	65.7	65.5	65.7	Under 70	68.2	68.0	68.2
Men	71.5	73.3	70.9	70 to 74	66.5	69.5	65.6
Under 70	73.4	75.9	72.5	75 to 79	64.5	64.7	64.4
70 to 74	71.6	73.8	70.9	80 and over	60.5	58.9	60.7

[1] Measured in terms of confinement to bed at home, in an institution, or in a short-term general hospital.

ALL INCAPACITY

Aged beneficiaries were asked how many weeks during the past year they had been confined to bed at home and how many weeks they had spent in the hospital. The measure was thus in terms of more or less complete incapacity. Excluded were all the ambulatory cases of disability and all the days when beneficiaries—despite heart conditions, arthritis, or other of the degenerative ailments that plague old age—nevertheless managed to be up and around.

In asking the question about weeks in the hospital, no attempt was made to define "hospital" or to delimit the term to general hospitals. Accordingly the reported stays in hospitals included time spent in nursing or rest homes, in mental or tuberculosis hospitals, and in veterans' homes and public or private welfare institutions primarily domiciliary in nature.

For many purposes and especially for comparison with other surveys of hospitalization rates, it was desirable to exclude such stays and to study the hospital utilization of aged beneficiaries in terms of short-term general hospitals only. Fortunately, the schedules were profusely annotated, especially in cases of long stays in institutions, and it was therefore possible to make the subtractions and arrive at hospitalization rates that could be assumed, with a reasonable degree of assurance, to represent rates in general hospitals.

For the purpose at hand, however, it is desirable to have an overall measurement—in terms of the number of days "in bed"—of the incapacity of aged beneficiaries. Hence, in this analysis of all incapacity the data are used as reported and include stays in institutions that, although primarily domiciliary in nature, were considered hospitals by the respondent.

TABLE 2.—*Percentage distribution of aged beneficiaries reporting incapacity, by sex and by weeks of incapacity [1] during survey year 1951*

Weeks of incapacity	Percentage distribution		
	Total	Men	Women
Total	100.0	100.0	100.0
1 or less	19.5	20.3	18.7
2	18.5	18.4	18.5
3	12.2	12.6	11.7
4	9.6	9.6	9.7
5	4.7	5.0	4.4
6	5.8	5.5	6.2
7 to 13	16.0	15.3	16.7
14 to 26	6.8	6.2	7.4
27 to 39	1.9	2.1	1.7
40 to 52	5.0	5.0	5.0

[1] Total number of weeks confined to bed at home and/or in an institution and/or short-term general hospital.

Seven in every ten aged beneficiaries were not confined to bed either at home or in a hospital or institution during the year (table 1). This indication of good health was somewhat greater among the men than among the women. The proportion for the men was 71.5 percent and for the women 66.5 percent.

Although relatively more of the younger beneficiaries than of those in the oldest group reported no hospitalization or confinement to bed at home, the differences were not striking. For all male beneficiaries, the proportion dropped from 73 percent among those under age 70 to 68 percent for those aged 80 and over. The corresponding decrease for the women was from 68 to 60 percent.

Beneficiaries who owned hospitalization insurance were somewhat less frequently confined to bed than were the others. To some extent, this finding is a reflection of their relatively younger age, but there is also the possibility that beneficiaries in poorer physical condition were unable to obtain or continue hospitalization insurance.

Of the beneficiaries reporting hospital or institutional stays or confinement to bed at home, one-fifth were incapacitated for a week or less and almost another fifth for 1 to 2 weeks (table 2).

The individuals incapacitated for 14 weeks or longer represented 13.7 percent of the aged beneficiaries with some incapacity (4.2 percent of all aged beneficiaries). Incapacity of this duration cannot help but have a serious impact on the general well-being of the family unit even if there is no hospitalization expense involved. The group with incapacity of at least 14 weeks is divided almost evenly into those with durations of 14 to 26 weeks and those with durations of more than half a year. The extremely long durations of 40 weeks or more—and almost all of these were actually full-year durations—were reported by 1 in 20 of the beneficiaries with some incapacity; the proportion was the same for men and women beneficiaries.

When distributed among all beneficiaries, whether or not incapacitated during the year, the days of incapacity per person per year averaged about 14⅓ for the men and 17⅓ for the women (table 3). The higher rate for women resulted from incapacity confining them to bed at home, averaging about 14½ days during the year. The average number of days spent in general hospitals or in other types of institutions was lower for the women beneficiaries than for the men.

To some extent, the hospital or institutional care of the women is understated by the survey procedure of excluding a wife beneficiary who was out of the household virtually the entire year. The man or woman retired-worker or aged-widow beneficiary, on the other hand, was always a member of the beneficiary group and, even if in an institution the entire year, was included in the survey. To indicate the possible understatement due to the survey procedures, the average number of days spent in general hospitals or institutions has been calculated for women beneficiaries other than wives of old-age beneficiaries. The average spent in short-term general hospitals was virtually the same (2.12 days, compared with the average of 2.07 days shown in table 3). The average for other institutions, however, was half again as high (1.20 days in contrast to 0.80 days).

The beneficiaries covered by hospital insurance averaged more days in general hospitals than did those without protection against these costs—2.80 days in contrast to 2.10. This difference is especially significant in the light of the lower average number of days of incapacity of all kinds for beneficiaries with hospitalization insurance; their average was 12.70 days, while beneficiaries not protected against hospital costs averaged 16.57 days. For both men and women alike, the average duration of incapacity was 4 days less for beneficiaries with hospitalization insurance than for the uninsured.

TABLE 3.—*Number of days of incapacity per aged beneficiary during survey year 1951 and percentage distribution of days by place of incapacity and by sex and ownership of hospitalization insurance*

Sex and insurance ownership	Number of days per beneficiary during survey year			
	Total	General hospitals	Institutions	At home in bed
All aged beneficiaries	15.69	2.25	1.06	12.37
With insurance	12.70	2.80	.24	9.66
Without insurance	16.57	2.09	1.30	13.17
Men	14.38	2.40	1.26	10.72
With insurance	11.45	2.78	.07	8.60
Without insurance	15.25	2.29	1.61	11.35
Women	17.32	2.07	.80	14.45
With insurance	14.28	2.83	.46	10.99
Without insurance	18.22	1.84	.91	15.47
	Percentage distribution of days			
All aged beneficiaries	100.0	14.4	6.8	78.8
With insurance	100.0	22.0	1.9	76.1
Without insurance	100.0	12.7	7.8	79.5
Men	100.0	16.7	8.8	74.5
With insurance	100.0	24.3	.6	75.1
Without insurance	100.0	15.0	10.6	74.4
Women	100.0	12.0	4.6	83.4
With insurance	100.0	19.8	3.2	77.0
Without insurance	100.0	10.1	5.0	84.9

The percentage distribution of days of incapacity, shown in the lower part of table 3, highlights the interrelation of ownership of hospitalization insurance and the place where beneficiaries spent their days of incapacity. For men, whether with or without insurance, three-fourths of the days were spent at home in bed. For men with hospitalization insurance, virtually all the days of incapacity not spent at home in bed were spent in short-term general hospitals; less

than 1 percent of the total number of their days of incapacity were in other institutions. Days of incapacity not spent at home in bed were much less concentrated for men without hospitalization insurance. Days in general hospitals accounted for 15 percent of their total and days in other institutions for 11 percent. Undoubtedly persons insured against hospitalization costs are freer to go to short-term general hospitals when care is needed. There is, however, another factor contributing to this difference between the insured and uninsured men. Men who spent the entire survey year—and sometimes preceding years as well—in veterans' hospitals accounted for a fairly sizable portion of the total number of days in institutions other than general hospitals; such beneficiaries possibly had neither opportunity nor need to acquire voluntary insurance against hospitalization costs.

INCAPACITY IN INSTITUTIONS

Analysis of incapacity in institutions other than general hospitals must necessarily be made on a basis that approaches a case-by-case study. The reasons are that so few of the beneficiaries reported incapacity in such institutions and that the survey procedures resulted in a concentration among beneficiaries classified as nonmarried men.

Of the more than 22,000 aged beneficiaries (retired workers, wives, and widows) included in the survey, only 88 (four-tenths of 1 percent) were identified as having been incapacited during the year in mental or tuberculosis hospitals, in veterans' homes, or in such institutions as rest homes, nursing homes, convalescent homes, welfare institutions, and fraternal homes. Of the 88 cases, more than half had been classified as nonmarried men, a significantly higher proportion than their representation among all aged beneficiaries (slightly more than one-fifth of the total). Few as the cases were, their time spent in institutions amounted to 23,500 days, or slightly more than 1 day apiece when averaged over all the aged beneficiaries in the survey.

Slightly more than half the 88 cases were incapacitated for the full year in such institutions. Others spent significant portions of the year in the institution and for the remainder of the survey year were bed bound at home. For still others, this so-called institutional incapacity consisted of a week or so in a nursing home after a stay in a short-term general hospital.

For the 88 beneficiaries, incapacity in such institutions averaged 267 days, or almost three-fourths of a full year. The average was slightly higher for the men than for the women, 274 days as against 255 days. If the time that they also spent in general hospitals or in bed at home is added, the average duration of their days of incapacity is raised to 277, with 284 the average for the men and 263 the average for the women.

Obviously, much of this institutional care was financed at public expense. Of the total number of days of institutional incapacity measured in the survey, about two-thirds were identified as having been in mental hospitals, tuberculosis sanatoriums, veterans' hospitals, or county or city infirmaries—all institutions that depend on public financing even though some patients may be charged on an ability-to-pay basis. Much of the remaining one-third was in fraternal and nonprofit institutions that may or may not be self-support-

ing through charges levied on the patients. Even for the cases identified as having been in proprietary nursing homes, an element of public financing was often present in that the public-assistance agency was paying the nursing-home bill.

TABLE 4.—*Aged beneficiaries confined to bed at home as percent of all aged beneficiaries and number of days in bed at home per case, during survey year 1951, by age at end of year and by sex and ownership of hospitalization insurance*

Sex and insurance ownership	Total	Age at end of survey year			
		Under 70	70 to 74	75 to 79	80 and over
	Those confined to bed as percent of all aged beneficiaries				
Total	26.1	25.2	26.0	27.1	28.5
With insurance	23.5	23.0	22.8	26.0	25.0
Without insurance	26.9	26.0	26.9	27.4	29.0
Men	23.1	21.9	22.7	24.3	25.9
With insurance	20.5	19.1	20.1	23.2	22.9
Without insurance	23.9	23.0	23.5	24.5	26.4
Women	29.9	28.3	30.1	31.9	34.1
With insurance	27.3	27.0	26.1	31.2	30.3
Without insurance	30.7	28.9	31.2	32.0	34.6
	Number of days in bed per case during survey year				
Total	46.4	40.2	44.2	51.1	71.3
With insurance	39.3	33.4	37.6	49.7	65.0
Without insurance	48.3	42.5	45.8	51.4	72.1
Men	45.3	40.5	41.9	51.4	57.9
With insurance	40.5	34.7	34.4	53.9	60.5
Without insurance	46.5	42.3	43.7	50.8	57.6
Women	47.5	40.0	46.4	50.7	92.8
With insurance	38.2	32.4	40.8	43.7	73.7
Without insurance	49.9	42.6	47.8	52.2	94.9

CONFINEMENT TO BED AT HOME

Beneficiaries reporting some confinement to bed at home comprised 23 percent of all the aged men beneficiaries and 30 percent of all the women. Somewhat higher proportions of the beneficiaries who had no insurance against hospitalization costs than of those with such protection spent some part of the year bedbound at home. That this is not a difference due entirely to age is apparent from table 4. In each age grouping, proportionately more of the beneficiaries without insurance than of those with insurance spent time in bed at home, and the number of days in bed averaged higher.

Although the proportion of all aged beneficiaries who were confined to bed at home rose only slightly with advancing age, the number of days of incapacity per bedfast case showed a marked increase at the highest age levels, especially for the women. Thus, of the women beneficiaries who were bedfast, those aged 80 and over spent more than twice as many days in bed as did those under age 70. For the men, the average for the highest age group was about half again as high as for the group under age 70.

Only about a fourth of all beneficiaries who spent some time in bed at home also had a period of hospitalization in a general hospital. For beneficiaries with hospitalization insurance, however, this percentage was closer to a third, and for those without insurance it was not much more than one-fifth. Of the beneficiaries confined to bed

at home, the following proportions were also hospitalized at some time during the year:

Insurance ownership	Total	Men	Women
Total	23.9	24.5	23.2
With insurance	32.6	32.7	32.5
Without insurance	21.6	22.4	20.8

Beneficiaries who were hospitalized as well as confined to bed at home during the year averaged longer in capacity at home than did those whose incapacity was solely at home—probably a finding indicative of a difference in the seriousness of the physical condition. The days spent at home in bed by beneficiaries who were also hospitalized during the year averaged 53 for the men and 56 for the women; both averages were about a fourth higher than for those not hospitalized (table 5).

HOSPITALIZATION IN GENERAL HOSPITALS

The information that the national beneficiary survey provides on confinement to bed at home and on institutional hospitalization has a unique value since such data had not hitherto been available. Data on beneficiaries' hospitalization in general hospitals, however, are probably of wider interest, in part because such hospitalization is likely to result in heavy financial burdens on the beneficiary and in part because data from other studies permit a comparison of old-age and survivors insurance beneficiaries with the total aged population. Hence, the remainder of this analysis is more detailed than were the preceding sections and draws in, whenever possible, related data from the survey of the total noninstitutional population aged 65 and over made in March 1952 by the Bureau of the Census.[3]

TABLE 5.—*Number of days in bed at home per case by whether or not beneficiary was in short-term hospital during survey year 1951, by sex and age at end of survey year*

Age and sex	Number of days in bed at home during survey year		Age and sex	Number of days in bed at home during survey year	
	No hospital stay	Hospital stay		No hospital stay	Hospital stay
Men	42.8	53.1	Women	44.8	56.4
Under 70	37.5	50.1	Under 70	38.1	46.7
70–74	39.6	50.2	70–74	43.8	54.5
75–79	49.0	57.9	75–79	46.7	64.1
80 and over	56.2	63.8	80 and over	90.2	101.0

Hospitalization rates.—One out of every 10 aged beneficiaries spent time in the hospital during the survey year.[4] The rates, which were not significantly different for the men and the women, show increasing hospital utilization as age advances (table 6).

[3] I. S. Falk and Agnes W. Brewster, Hospitalization and Insurance Among Aged Persons: A Study Based on a Census Survey in March 1952, Bureau Report No. 18, Division of Research and Statistics, Social Security Administration, April 1953. The findings are summarized in Document No. 10 of this volume.

[4] The old-age and survivors insurance survey data are in terms of persons hospitalized in the course of the year, disregarding the number of times they were admitted to a hospital. The census data included in this article are also in terms of persons hospitalized; additional data from that survey show 1.1 admissions per hospitalized person.

Proportionately more of the beneficiaries who had hospitalization insurance than of those without this protection had hospital care. The higher rates for beneficiaries with insurance against hospital costs are consistent with the findings of the census survey, also summarized in table 6. The old-age and survivors insurance beneficiary survey adds the information, however, that the higher hospitalization rates of the group with insurance are associated with lower rates of incapacity of all types—or all types measured by the survey—than were experienced by the group without insurance.

The proportions of aged beneficiaries of old-age and survivors insurance who had hospitalized illnesses are considerably higher than the proportions found for the total noninstitutional population aged 65 and over in March 1952. A difference in this direction is to be expected. Of the total aged population in the census survey, almost one-fourth were still employed—a rough indication of physical capacity—while aged beneficiaries were for the most part out of the labor force.

TABLE 6.—*Number hospitalized per 100 aged beneficiaries, survey year 1951, and per 100 in the aged noninstitutional population,[1] calendar year 1951, by age[2] and by sex and ownership of hospitalization insurance*

Age and employment status	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries, total	10.5	13.1	9.7	10.7	12.8	10.0	10.3	13.5	9.3
Under 70	9.6	11.7	8.8	9.6	10.6	9.2	9.6	12.8	8.4
70–74	10.6	13.3	9.8	10.6	13.2	9.9	10.5	13.4	9.7
75 and over	11.5	15.6	10.6	11.8	15.4	11.0	11.0	16.0	10.1
75–79	11.3	15.4	10.3	11.8	15.5	10.8	10.4	15.2	9.4
80 and over	12.2	16.5	11.6	11.8	15.3	11.3	13.1	19.6	12.3
Aged noninstitutional population, total	6.7	9.2	5.8	7.3	10.6	5.9	6.1	7.6	5.7
65–69	6.9	9.3	5.5	8.2	11.0	6.1	5.7	7.2	5.0
70–74	6.1	8.8	5.2	6.2	8.2	5.4	6.1	9.6	5.1
75 and over	6.8	9.2	6.4	7.1	12.8	6.0	6.6	6.0	6.7
In the labor force	5.8	8.2	3.9	6.3	9.0	4.2	3.3	4.0	2.8
65–69	6.1	8.1	4.1	7.1	9.5	4.6	1.9	1.4	2.2
70–74	5.8	8.5	4.1	6.1	8.3	4.7	3.9	9.1	0
75 and over	4.4	7.8	3.1	3.3	6.8	1.9	[3]	[3]	[3]
Not in the labor force	6.9	9.8	6.1	7.9	12.9	6.7	6.3	8.1	5.8
65–69	7.3	10.4	6.0	9.6	14.4	7.5	6.3	8.5	5.3
70–74	6.3	9.1	5.5	6.3	8.1	5.8	6.2	9.6	5.4
75 and over	7.1	9.4	6.7	7.9	15.7	6.8	6.5	5.6	6.6

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 37.
[2] For old-age and survivors insurance beneficiaries, age at end of survey year; for noninstitutional population, age in March 1952.
[3] Percentage not computed; base too small.

The rates for the beneficiaries, however, are higher even than the rates for the noninstitutional population not in the labor force and of relatively comparable age groups. Here it must be emphasized that the age group "under 70" for old-age and survivors insurance beneficiaries is not comparable with the age group "65–69" of the census survey. Beneficiaries tend to be concentrated at the upper end of this interval, since the average age at which they start to draw benefits has been close to 69 and, for inclusion in the survey, they had to have been on the rolls at least a year. Furthermore, the census survey encompassed the hospital experience of persons under age 65 in 1951. The population surveyed was aged 65 or over in March 1952, and the

ages are tabulated as of that date; the age distribution is affected all along the line.

The higher hospitalization rates for old-age and survivors insurance beneficiaries may also be due in part to inclusion of persons who were in institutions. Although the measurement for purposes of the present analysis has been adjusted to approximate hospitalization in short-term general hospitals, the beneficiary population includes persons in mental, tuberculosis, and other institutions, and the "hospitalization" includes periods when persons in domiciliary institutions were receiving medical care for acute illnesses. (As an example of the latter, a beneficiary living at a county farm who spent several weeks in the hospital ward with pneumonia was counted as spending that period in a "short-term general hospital.") Hence, if the institutionalized population is more likely than the noninstitutionalized to receive hospital care for acute illnesses or for acute phases of their conditions, somewhat higher hospitalization rates would be expected for the beneficiaries.[5] The beneficiary survey data indicate that this may be the case. When beneficiaries are classified by living arrangements, the proportion hospitalized becomes roughly 10 percent for those living in their own homes, 11 percent for those residing in the home of a relative, and 12 percent for roomers or boarders. The proportion is as high as 17 percent, however, for the relatively small group consisting mainly of persons in institutions.

TABLE 7.—*Number hospitalized per 100 aged insurance beneficiaries, survey year 1951, and per 100 in the aged noninstitutional population,[1] calendar year 1951, by place of residence and by sex and ownership of hospitalization insurance*

Residence and size of community	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries:									
Urban	10.6	13.2	9.9	11.0	12.8	10.5	10.2	13.6	9.1
More than 100,000	10.4	13.6	9.4	11.1	14.0	10.2	9.6	13.1	8.5
10,000 to 99,999	11.0	11.8	10.7	11.1	10.4	11.3	10.9	13.6	10.1
2,500 to 9,999	10.7	14.5	9.7	10.5	13.2	9.7	11.0	16.2	9.7
Rural-nonfarm	9.9	12.6	9.2	9.1	12.1	8.4	11.1	13.6	10.6
Farm	9.3	15.0	7.8	9.2	16.9	7.3	9.4	(2)	9.1
Aged noninstitutional population:									
Urban	6.5	9.0	5.4	7.1	10.2	5.3	6.0	7.6	5.4
Rural-nonfarm	7.6	8.4	7.3	8.5	11.0	7.6	6.7	5.1	7.1
Farm	6.2	12.3	5.1	6.5	12.2	5.4	5.8	12.5	4.7

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 35.
[2] Percentage not computed; base too small.

Still another difference between the samples of the two surveys could be expected to produce higher hospitalization rates for the beneficiaries. Old-age and survivors insurance beneficiaries are predominantly urban dwellers. Of the retired-worker and aged-widow beneficiaries surveyed, 84 percent were living in urban communities (with populations of 2,500 or more) and only 3 percent on farms. In contrast, 64 percent of the total aged population included in the census survey

[5] The effect on the total would be slight, however, since only a very small proportion of the beneficiaries were institutionalized; 1.7 percent were in institutions at the end of the survey year.

resided in urban communities, and as many as 15 percent lived on farms. Among persons without protection against hospital costs—and the bulk of the aged lack insurance—hospitalization rates tend to be lower for farm dwellers than for persons living in urban or rural-nonfarm communities. Although the findings of both surveys show this farm-nonfarm difference, any comparison of the specific rates in table 7 must recognize that the census data relate to the total aged population, including employed persons.

By covering the aged population in general, the census survey took in groups apt to be less financially secure than old-age and survivors insurance beneficiaries, as well as those whose earnings place them at a relative economic advantage. (The total aged population includes, for example, proportionately twice as many women aged 75 and over as were found among aged beneficiaries surveyed in 1951.) It is possible, therefore, that financial barriers to medical care were partly responsible for keeping hospitalization rates among the aged population not in the labor force below those for aged beneficiaries.

No substantiating data on the effect of income on hospitalization rates are available. The beneficiary survey permits a comparison of hospital rates with amount of independent retirement income during the survey year,[6] but the results are inconclusive. The fact that there was no consistent or significant increase in utilization of general hospitals as income rose could have a number of interpretations. Retirement income, while the best measure of what the beneficiary can count on for day-to-day living, does not necessarily reflect the level of total money income or the amount of assets available for meeting such unusual expenses as hospitalization. Furthermore, the beneficiary did not necessarily pay his own hospital bill; the hospitalization may have been financed by children or other relatives or, frequently, was at public expense. There is still another possibility; beneficiaries with higher retirement incomes may have been in better health so that they were less likely to need hospitalization. On this latter point, although tabulations were not made of the total number of days of incapacity by income group, background data indicate that the lowest retirement incomes tend to be associated not only with the most advanced ages but with poor health, since poor health may actually have caused low retirement benefits through interruptions in earnings.

Thus, about the only conclusion that can be drawn from table 8 is that, within each income group, beneficiaries who had some insurance against hospital bills were more likely to be hospitalized in a general hospital than were those who lacked such protection.

[6] Retirement income is money income from independent sources that can be expected to continue for the lifetime of the beneficiary. Thus it includes, in addition to 12 months' old-age and survivors insurance benefits, employer and union pensions, veterans' pensions, private annuities, and income from trust funds, rents, interest, and dividends. It does not include earnings, nor does it include nonindependent sources, such as public assistance and contributions and gifts from relatives or friends.

TABLE 8.—*Number hospitalized in short-term general hospitals per 100 aged beneficiaries, by ownership of hospitalizeation insurance and independent money retirement income,[1] for survey year 1951*

Marital classification and ownership of insurance	Retirement income during survey year					
	Total	Less than $300	$300–$599	$600–$1,199	$1,200–$1,799	$1,800 and over
Nonmarried	11.5	11.0	11.4	11.2	10.5	16.8
With insurance	14.4	15.5	14.3	14.5	10.6	18.6
Without insurance	10.8	10.4	10.9	10.2	10.4	15.7
Married	9.5	8.4	9.8	9.0	10.6	9.5
With insurance	11.9	12.3	13.8	11.2	13.6	10.6
Without insurance	8.6	7.4	8.9	8.3	9.2	8.9

[1] For beneficiary (and spouse, if any) represents, in addition to 12 months' old-age and survivors insurance benefits, income from employer and union pensions, veterans' pensions, and private annuities and from trust funds, interest, and dividends.

TABLE 9.—*Average number of days of hospitalization per hospitalized person among aged beneficiaries, survey year 1951, and among the aged noninstitutional population,[1] calendar year 1951, by age[2] and ownership of hospitalization insurance*

Age and employment status	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries, total	21.5	21.3	21.6	22.5	21.7	22.8	20.1	20.9	19.8
Under 70	20.5	19.4	21.0	21.2	18.8	22.3	19.7	19.9	19.6
70 to 74	22.1	19.8	23.0	23.2	17.6	25.4	20.6	22.4	19.9
75 and over	21.9	26.5	20.4	22.8	29.7	20.6	20.1	20.4	20.0
75 to 79	21.5	24.3	20.5	22.7	25.8	21.5	19.3	21.2	18.6
80 and over	22.9	35.7	20.2	23.1	45.1	18.6	22.3	[3]	23.4
Aged noninstitutional population, total	24.8	16.4	29.5	25.2	16.0	32.4	24.3	17.1	27.1
65 to 69	20.4	15.2	25.6	16.5	14.3	19.4	25.7	16.8	31.4
70 to 74	34.7	17.8	44.1	45.8	13.9	64.9	24.7	21.7	26.3
75 and over	22.4	18.4	23.5	22.3	23.3	21.9	22.6	9.1	24.6
In the labor force	13.9	12.5	16.2	13.4	12.0	15.7	18.4	17.3	19.5
Not in the labor force	27.5	18.5	31.3	31.7	20.1	37.4	24.6	17.1	27.4

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 48.
[2] For old-age and survivors insurance beneficiaries, age at end of survey year; for noninstitutional population, age in March 1952.
[3] Percentage not computed; base too small.

Days per person hospitalized.—The aged beneficiaries who were hospitalized during the survey year spent an average of 3 weeks (21.5 days) in a short-term general hospital. While the overall averages of those with and without hospitalization insurance were almost identical, there were variations when the insured and the uninsured were compared by age group and by sex. In the age groups under 75 the insured men spent fewer days in the hospital on the average than the uninsured; after age 75 the insured men spent more days than the uninsured in the hospital. The stays for the women beneficiaries—which on the average were nearly 2½ days shorter than those for men—were slightly higher among women with protection against hospital costs than among the women without such protection.

In comparison with the average for the total noninstitutional aged population, including both those in and those out of the labor force, the average stay of beneficiaries was 3 days shorter per hospitalized

person. As might be expected, the census survey showed much longer stays among persons not in the labor force (averaging about 4 weeks) than among those still working (averaging 2 weeks). The average for aged beneficiaries fell about halfway between these two averages for the total aged population.

That there are basic differences between the population groups covered by the two surveys has been pointed out in relation to the hospitalization rates. These differences affect the duration of hospital stays as well. To account for the wide variation in durations shown in table 9, it is helpful to have a distribution of the hospitalized persons in the two surveys by the time each person spent in the hospital and a similar distribution of the days of hospital care by length of stay (table 10). Of the hospitalized beneficiaries, insured and not insured alike, 30 percent spent 1 week or less in the hospital. An identical proportion of the total aged population that was uninsured had equally short stays. Of the insured group, on the other hand, as many as 37 percent were in hospitals for a week or less—a reflection of the generally shorter stays of persons still in the labor force.

TABLE 10.—*Percentage distribution of persons hospitalized and of hospital days, by specified number of days in hospital among aged beneficiaries, survey year 1951, and among aged noninstitutional population, calendar year 1951* [1]

Sex and insurance ownership	Aged beneficiaries, by specified number of days in hospital per hospitalized person								Aged noninstitutional population, by specified number of days in hospital per hospitalized person							
	Total	1 to 7	8 to 14	15 to 21	22 to 30	31 to 60	61 to 90	91 and over	Total	1 to 7	8 to 14	15 to 21	22 to 30	31 to 60	61 to 90	91 and over
	Percentage distribution of hospitalized persons															
Total	100.0	29.9	25.9	14.4	9.4	14.3	3.4	2.7	100.0	32.1	23.7	17.9	9.4	10.2	4.6	2.4
With insurance	100.0	28.7	27.4	14.5	9.2	13.9	4.1	2.1	100.0	36.6	23.2	19.0	9.9	9.2	2.1	0
Without insurance	100.0	30.4	25.3	14.3	9.4	14.4	3.2	2.9	100.0	29.6	24.0	16.8	9.2	10.8	6.0	3.6
Men	100.0	28.3	25.6	14.8	9.7	15.2	3.4	3.0	100.0	32.3	21.4	18.4	12.9	10.0	2.5	2.5
With insurance	100.0	28.7	24.5	15.9	9.5	15.3	4.2	1.9	100.0	38.6	23.9	18.2	8.0	9.1	2.3	0
Without insurance	100.0	28.1	25.9	14.4	9.8	15.2	3.1	3.4	100.0	27.4	19.5	18.6	16.8	10.6	2.7	4.4
Women	100.0	32.1	26.4	13.8	8.9	13.0	3.5	2.3	100.0	31.9	26.2	16.8	5.8	10.5	6.8	2.0
With insurance	100.0	28.8	30.8	12.9	8.9	12.3	4.0	2.3	100.0	33.3	22.2	20.4	13.0	9.3	1.9	0
Without insurance	100.0	33.5	24.5	14.2	8.9	13.3	3.3	2.3	100.0	31.4	27.7	15.3	2.9	10.9	8.8	2.9
	Percentage distribution of hospital days															
Total	100.0	5.5	12.7	11.7	10.7	27.4	12.5	19.6	100.0	6.1	11.3	13.6	10.2	18.4	14.4	26.0
With insurance	100.0	5.4	13.5	11.9	10.6	26.7	14.8	17.1	100.0	11.0	16.7	22.4	15.2	25.3	9.4	0
Without insurance	100.0	5.6	12.3	11.6	10.7	27.7	11.4	20.6	100.0	4.6	9.6	10.9	8.6	16.2	15.9	34.2
Men	100.0	5.0	11.9	11.5	10.6	27.7	11.9	21.4	100.0	6.2	9.9	13.8	13.8	17.6	7.4	31.3
With insurance	100.0	5.3	11.9	12.8	10.7	28.1	15.4	15.8	100.0	11.7	17.3	22.3	13.2	26.2	9.3	0
Without insurance	100.0	4.9	11.9	11.0	10.5	27.6	10.7	23.4	100.0	4.1	7.1	10.5	14.0	14.3	6.7	43.4
Women	100.0	6.4	13.7	12.0	10.9	26.9	13.1	17.0	100.0	6.1	12.9	13.5	6.2	19.2	22.0	20.1
With insurance	100.0	5.5	15.5	10.9	10.5	24.9	14.1	18.7	100.0	10.0	15.9	22.4	18.1	23.9	9.7	0
Without insurance	100.0	6.7	13.0	12.5	11.1	27.8	12.7	16.2	100.0	5.1	12.2	11.3	3.2	18.1	25.0	25.1

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), tables 14, 40, and 41.

TABLE 11.—*Number of days of hospital care per 100 aged beneficiaries in short-term hospitals, survey year 1951, and per 100 in the aged noninstitutional population,*[1] *calendar year 1951, by age*[2] *and by sex and ownership of hospitalization insurance*

Age and employment status	Total			Men			Women		
	Total	With insurance	Without insurance	Total	With insurance	Without insurance	Total	With insurance	Without insurance
Aged beneficiaries, total	225	280	209	240	278	229	207	283	184
Under 70	196	228	184	204	200	205	189	255	164
70–74	233	263	225	247	233	251	217	301	193
75 and over	252	414	217	269	459	226	221	325	202
75–79	242	374	211	267	400	233	200	324	174
80 and over	280	589	235	274	689	210	292	(3)	287
Aged noninstitutional population, total	165	151	170	184	168	190	148	130	154
65–69	141	141	140	135	157	118	146	121	157
70–74	213	157	232	283	114	350	151	208	135
75 and over	153	168	150	158	298	132	149	54	165
In the labor force	81	102	64	85	108	66	61	70	55
Not in the labor force	190	181	193	252	258	250	156	139	160

[1] Data from Bureau Report No. 18 (Division of Research and Statistics), table 53.
[2] For old-age and survivors insurance beneficiaries, age at end of survey year; for noninstitutional population, age in March 1952.
[3] Percentage not computed: base too small.

Hospital stays of as long as 2 months or more were also equally frequent among beneficiaries with insurance and beneficiaries without insurance (6 percent of those hospitalized). Of the total aged population that was hospitalized, however, only 2 percent of those with insurance but almost 10 percent of the uninsured spent 2 months or longer in the hospital. Persons with hospital care of 2 months or longer accounted for about one-third of all the hospital days for both the beneficiaries with insurance and those without, in contrast to less than one-tenth of the days for the total aged population with insurance and one-half of the days for the aged population without insurance.

Some of these differences are undoubtedly traceable to differences in definition of what constituted institutional care in the two surveys. The census counted care in a Veterans' Administration general hospital as hospital care even if it lasted 365 days; the adjustments made in the beneficiary survey data classified care in Veterans' Administration facilities as institutional care without distinguishing between domiciliary and general hospital facilities. While this difference would partially explain the variation between the two survey findings for men, it does not explain why there was a larger proportion of uninsured women in the total aged population with long stays; they accounted for a much larger proportion of days than did uninsured women beneficiaries. Some of the difference could lie in the beneficiary survey procedures that excluded from the beneficiary group a wife who was out of the home for all or practically all the survey year. A more probable explanation is found in the presence in the total aged population of a much higher proportion of women at the most advanced ages.

Days of hospital care per 100 beneficiaries.—When the days of hospital care are related to all beneficiaries rather than to those who were hospitalized, the resulting rates measure not only the length of time spent in the hospital but the differences in hospitalization rates. As

a group the aged beneficiaries used during the survey year 225 days of general hospital care per 100 persons, or 2¼ times the national average for persons of all ages (100 days per 100 persons). Insured beneficiaries had 280 days of hospital care and uninsured 209. The number of days of care per 100 increased with advancing age, except for the uninsured men, whose high institutional rates may have kept down the hospital days for the oldest persons.

The old-age and survivors insurance beneficiaries used more days of hospital care in a year than did the aged noninstitutional population—225 per 100 persons compared with 165 per 100. The differences are less if the comparison is between the beneficiaries and those not in the labor force. The insured women in the 2 surveyed groups showed considerably different rates—283 days per 100 women for the old-age and survivors insurance beneficiaries and 139 days per 100 for the noninstitutional population not in the labor force. It is possible that this market difference—which stems from the number hospitalized rather than the average stay—is the result of sampling variability between the 2 surveys; aged women with hospitalization insurance made up a relatively small part of each survey population.

CONCLUSION

Heretofore knowledge of the incapacity of the aged population has been largely in terms of hospitalized illness. The amount of hospital care used by older persons has been ascertained but without relation to the amount of incapacity in bed at home or in institutions. Other studies have shown that ownership of insurance against hospital costs affects the rate of admission and length of stay in general hospitals, but they have not permitted an examination of these differences against a background of nonhospitalized incapacity. Data from the 1951 national beneficiary survey presented here throw some additional light on these important interrelationships.

10. THE AGED NEED PROTECTION FROM THE COSTS OF HOSPITAL CARE [1]

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Opinions expressed here are the authors' and do not necessarily express the views of the Social Security Administration or the Federal Security Agency.

Nationwide information is available annually on hospital utilization for the population as a whole. Until late in 1952, however, the corresponding basic facts regarding hospital care among the aged were still being derived from studies made 10 to 20 years ago. In the interim, hospital care has undergone many changes; and the financing of hospital care through insurance has become widespread, affecting the receipt of care in all ages of the population. Current data on utilization are needed to plan health services for the expanding population in the higher ages of life.

Must Be Able To Pay

Utilization is so linked to ability to pay that it can be understood clearly only in relation to the financing of hospital care, whether for the population generally, among insured and noninsured groups, or among those receiving care at public expense. This is especially true for the aged because they have less than average financial resources and higher morbidity rates. The pooling of hospital costs—through insurance, taxation or both—is now widely accepted for the financing of short-term care. Insurance plans and companies report that 56 percent of the population had some kind or amount of hospitalization insurance at the end of 1951.[2] But there has been no reliable estimate of the corresponding percent among those 65 and over.

To ascertain the current situation about insurance ownership and about hospital utilization among the aged, and to explore possible ways of strengthening their economic security, the Division of Research and Statistics of the Social Security Administration collected all available data from published documents. In addition, Blue Cross plans, retirement plans, public-assistance agencies, and others which had age-specific records generously furnished special tabulations. The collected pieces had many limitations, however, with respect to their wider application. To get better nationwide estimates for people 65 and over, the Current Population Survey of the Bureau of the Census was utilized. In March 1952 special questions dealing

[1] From the Modern Hospital (April 1953), pp. 88, 90, 92, 94, 96.

[2] Annual Survey of Accident and Health Coverage in the United States, as of December 31, 1951. The Health Insurance Council, New York, June 1952, 31 pp.

with the ownership of hospitalization insurance and the receipt of hospital care in 1951 were added to the census interview questionnaire, to be asked of or about every person 65 and over in the representative sample of 25,000 households.[3] The replies provided the basis for this study.

The noninstitutional population of persons 65 and over is shown in table 1, distributed according to age, sex, race, urban-rural residence, and employment status. The percent that had some hospitalization insurance on the survey date is also shown for each category. Note that 26 percent of all persons 65 years and over had insurance but that proportionately more men (30 percent) than women (23 percent) were insured; and note that there were fewer men than women in the higher ages. The extent of insurance ownership declines markedly with age—36 percent owned insurance in ages 65 to 69, but only 15 percent in ages 75 and over. As a result, the insurance was relatively concentrated in the age group 65 to 69, the largest age group and the group with the largest proportion still gainfully employed. The proportion with insurance was nearly three times as large among white persons (28 percent) as among nonwhite persons (11 percent), and twice as large among urban (30 percent) as among farm residents (15 percent). The population 65 years and over is, for the most part, not in the labor force. The percentages with insurance indicate clearly that insurance ownership was directly related to membership in the labor force. There is no question that persons 65 and over lag far behind the rest of the population in the extent of protection available to them.

TABLE 1.—*The aged population and ownership of hospitalization insurance*

[Noninstitutional population 65 and over, March 1952]

Population group	Number of persons in each population group (thousands)			Percentage distribution			Percent with some insurance in each population group		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total	12,006	5,620	6,386	100.0	100.0	100.0	26	30	23
65 to 69	4,816	2,338	2,478	40.1	41.6	38.8	36	42	31
70 to 74	3,343	1,574	1,769	27.9	28.0	27.7	25	28	22
75 and over	3,847	1,708	2,139	32.0	30.4	33.5	15	16	14
White	11,134	5,227	5,907	92.7	93.0	92.5	28	31	24
Nonwhite	872	393	479	7.3	7.0	7.5	11	16	6
Urban	7,640	3,406	4,234	63.6	60.6	66.3	30	36	26
Rural nonfarm	2,522	1,219	1,303	21.0	21.7	20.4	22	26	18
Farm	1,844	995	849	15.4	17.7	13.3	15	17	14
In the labor force	2,791	2,299	492	23.2	40.9	7.7	44	45	41
Not in the labor force	9,215	3,321	5,894	76.8	59.1	92.3	21	20	21

DATA PERMIT COMPARISONS

Tables 2 and 3 give some key figures on hospitalization among the aged. Data in table 2 reflect the utilization in 1951 for the March 1952 population and permit comparisons between insured and noninsured persons, as well as among different segments of the aged population of that date. Because of the retroactive nature of the survey, made in March 1952 but measuring hospital experiences in the 12 months of 1951, the data in table 2 include care received by some

[3] For more details on methodology and findings, see Social Security Bulletin, November 1952.

persons who were only 64 in 1951 and exclude hospital care received by all persons who were 65 and over in 1951 and died during that year and early 1952. The utilization rates adjusted for these two groups are shown in table 3; this second set of figures therefore reflects the total amount of hospital care received by all noninstitutional persons who were 65 and over at the time care was received.[4] The adjusted rates of table 3 have the virtue of comparability with hospital statistics as usually presented, being equivalent to rates derived on a current basis. Unfortunately, they do not lend themselves to the comparisons among population groups and between insured and noninsured persons that are possible from table 2.

Higher admission rates but shorter hospital stays are the general rule for insured—as against noninsured—persons (table 2). White and nonwhite persons differ in utilization, and there are contrasts between urban and farm residents in admissions and days of care. The relatively better health that may be presumed for aged persons still in the labor force is reflected in their low rates of admission and short average stays. As a result, their days of hospital care per thousand are much lower than for those not in the labor force, whether insured or not.

TABLE 2.—*Hospitalization rates in 1951*

[Noninstitutional population 65 and over, March 1952]

	Admissions per thousand persons			Hospital days per admission			Hospital days per thousand persons		
	All	With some insurance	With no insurance	All	With some insurance	With no insurance	All	With some insurance	With no insurance
Both sexes	73	103	63	22.5	14.7	27.0	1,649	1,506	1,700
Male	82	116	68	22.3	14.6	28.0	1,837	1,685	1,903
Female	65	88	59	22.5	14.7	26.2	1,483	1,297	1,537
White	76	103	66	22.4	14.3	27.1	1,698	1,479	1,781
Nonwhite	41	109	33	25.1	21.8	26.4	1,034	2,369	877
Urban	71	98	60	25.8	14.9	33.6	1,843	1,451	2,014
Rural nonfarm	82	95	78	19.9	15.2	21.6	1,636	1,443	1,691
Farm	70	152	55	12.4	13.7	11.7	862	2,080	643
In the labor force	64	85	47	12.6	12.0	13.5	806	1,020	637
Not in the labor force	76	114	66	25.0	15.9	29.1	1,900	1,813	1,921

[4] The adjustments for age 64 were based on the hospitalization rates for persons 65 to 69. The adjustments for decedents were made by applying hospitalization rates, by age groups, to data on deaths according to place of death. It was assumed that: noninstitutional deaths had the average frequency and amount of hospitalization of survivors; hospital deaths had one admission of average duration each—to cover terminal and prior hospitalization in the year. We are indebted to the Office of Vital Statistics for use of their punchcards for a 10 percent sample of all deaths in 1949. Further details concerning these adjustments are given in the Social Security Bulletin, November 1952.

TABLE 3.—*Hospital utilization in 1951*

[Survey population 65 and over, March 1952; and all persons 65 and over when hospitalized]

Sex and age	Admissions per thousand persons		Hospital days per thousand persons	
	Survey population, March 1952 [1]	1951 population (adjusted)[2]	Survey population, March 1952 [1]	1951 population (adjusted)[2]
Both sexes	73	93	1,649	2,051
65 to 69	78	86	1,406	1,538
70 to 74	69	89	2,133	2,587
75 and over	71	104	1,530	2,229
Male	82	105	1,837	2,291
65 to 69	96	105	1,349	1,479
70 to 74	68	93	2,831	3,366
75 and over	77	117	1,583	2,414
Female	65	82	1,483	1,839
65 to 69	62	68	1,460	1,593
70 to 74	69	87	1,509	1,892
75 and over	67	94	1,487	2,080

[1] Confined to the living noninstitutional population aged 65 and over in March 1952.
[2] Includes persons aged 65 and over who died in 1951, and excludes persons who were 64 when hospitalized.

In the adjusted data (table 3), the admission rate for the whole noninstitutional population aged 65 and over in 1951 was 93 per thousand, in contrast to 73 per thousand among the March 1952 population, and hospital days per thousand were 2,051 instead of 1,649 showing the effect of including admissions and days for aged persons who died during the year or prior to the survey date. In the adjusted data, both the admission rates and the days of care per thousand generally increase with advancing age, reflecting the higher death rates at the highest ages. The male rate of 2,291 days per thousand, the female rate of 1,839, and the rate for both sexes of 2,051 are nearly doubled the 1951 rate of 1,131 for the population of all ages, shown later in table 6.

The long stays in the hospital of a relatively small proportion of persons can account for a large share of the total hospital days a group receives (table 4). The insured and the noninsured differed considerably in this respect, however, because only a very small fraction of those with insurance remained in the hospital longer than 60 days and, in the survey sample, none remained longer than 90 days. The figures suggest why insurance plans can, at relatively low cost, increase the maximum benefit days from 21 or 30 to 90, 120 or more. If there were an unfavorable selection of risk among the insured membership, such as was apparent for aged persons who had no insurance in the March 1952 population, a substantial increase in days of care per thousand would be involved.

TABLE 4.—*Hospitalized persons and days of hospital care in 1951 by duration and insured status*

[Noninstitutional population 65 and over, March 1952]

Durations	Total	With some insurance	With no insurance
	Percent	*Percent*	*Percent*
Hospitalized persons	100.0	100.0	100.0
Receiving less than 31 days	82.8	88.7	79.6
Receiving 31 to 365 days	17.2	11.3	20.4
Hospital days	100.0	100.0	100.0
Persons receiving less than 31 days	41.2	65.3	33.7
Persons receiving 31 to 365 days	58.8	34.7	66.3
Days, to the 31st	20.7	20.6	20.7
Days, beyond the 30th	38.1	14.1	45.6
Hospitalized persons	100.0	100.0	100.0
Receiving less than 61 days	93.0	97.9	90.4
Receiving 61 to 365 days	7.0	2.1	9.6
Hospital days	100.0	100.0	100.0
Persons receiving less than 61 days	59.7	90.6	49.9
Persons receiving 61 to 365 days	40.3	9.4	50.1
Days, to the 61st	16.7	7.7	19.5
Days, beyond the 60th	23.6	[1] 1.7	30.6

[1] No one in this group in the survey sample had more than 90 days during the year.

TABLE 5.—*Method of paying hospital bills in 1951*

[Hospitalized persons in the noninstitutional population 65 and over, March 1952]

Source of payment	Total	With some insurance	With no insurance
Total	100.0	100.0	100.0
Payment from a single source	76.1	45.4	92.8
By person or spouse	38.1	6.7	55.1
By relative	10.2	1.5	15.0
By insurance	12.6	35.8	----
By others	1.3	.7	1.6
No charges	13.9	.7	21.1
Payment from multiple sources	23.9	54.6	7.2
Payment from single or multiple sources involving: [1]			
Person or spouse [2]	58.8	53.7	61.5
Person, spouse, and relative [2]	72.2	62.7	77.3
Relative	18.1	11.2	21.9
Insurance	31.2	88.8	----
Others	1.6	.7	2.0
No charges	14.7	1.5	21.9

[1] Not additive.
[2] Also includes a few instances of patient plus free care, relative plus free care, and relative and other.

Turning to the question of how aged people pay their hospital bills (table 5), it is evident that the insured and the noninsured met hospital charges quite differently. For 36 percent of the insured (but for only 13 percent of the total population) insurance alone took care of the bill; it required supplementation for 53 percent of the insured. Among the noninsured, 55 percent met the bill entirely themselves, but more than a fifth had care with no charges made, and relatives met the bill entirely for 15 percent.

Experiences in furnishing hospital care to persons 65 and over, which were assembled in the course of these studies, are summarized in table 6. The rates apply to both sexes combined and are based on a wide variety of data. With the basis laid in tables 2 and 3 for examining differences in rates among different segments of the aged population, the reader acquainted with the characteristics of group payment plans can discover some of the explanations for wide divergence in rates evident among the plans. Limitations of space do not permit more than pointing out that there are differences in age distribution, urbanization, scope of insurance benefits or of public provisions for hospital care, extent of insurance ownership, membership in the labor force, and in availability of hospital facilities and outpatient services. In varying degrees, such factors affect the rates in the different experiences shown.

TABLE 6.—*Hospital utilization among persons 65 and over* [1]

Group	Year	Admissions per thousand	Days per admission	Days per thousand
United States, all ages	1951	112	10.1	1,131
SSA, census survey, 65 and over	1951	93	22.1	2,051
Insured		121	14.8	1,792
Not insured		78	26.8	2,090
Common costs of medical care	1928–31	61	24.6	1,501
National health survey	1935–36	50	29.0	1,456
Eastern health district, Baltimore	1938–43	53	30.0	1,682
OASI beneficiaries, 65 and over	1951	105	25.0	2,620
Insured		130	24.6	3,200
Not insured		97	25.6	2,500
Insurance experiences:				
Blue Cross plans:				
(*a*) State, urban-rural	1937–48	138	13.4	1,849
(*b*) State, more urban	1950	174	14.5	2,520
(*c*) Large city and suburban	1950	141	10.8	1,529
(*d*) Metropolitan area	1951	193	12.8	2,473
Other:				
HIP members	1948	125	19.1	2,390
Permanente	1950	127	8.2	1,040
GE pensioners	1950–51	163	14.6	2,380
Missouri Pacific pensioners	1949	433	13.5	5,846
OAA, counties in 9 States	1946			
Minimum		72	20.9	1,505
Median		106	25.8	2,735
Maximum		160	40.9	6,544
Canadian public insurance:				
British Columbia	1950	172	17.6	3,020
Saskatchewan, 65 and over	1951	334	22.4	7,485
Excluding OA pensioners		303	20.8	6,298
OA pensioners		393	25.1	9,864

[1] Sources on which these data were based may be obtained from Mr. Falk at the Division of Research and Statistics, Social Security Administration, Washington, D. C.

In 1951, those who were 65 and over received nearly twice as much general hospital care per capita as the population of all ages. This resulted mainly from their relatively high average length of hospital stay. As in other age groups, short-term cases predominated among the aged, but their relatively few long-term cases were responsible for a large proportion of all the days of hospital care they received. This finding invites review of the use of general hospital beds, personnel and funds for the care of long-term cases among the aged.

Among persons 65 and over, the frequency of hospitalization and the amount of hospital care in 1951 varied by age, sex, color, place of residence, and labor-force status, and markedly according to insured status. Since the noninsured are predominantly groups that are

presumably worse-than-average risks (they are older; more are retired and unable to work; they include public-assistance cases), it may have come as a surprise that they had fewer admissions than the insured. Because of their longer average stays, they nevertheless received a larger amount of hospital care. Thus, financial burden was disproportionately heavy on those least equipped to bear it—those with no insurance protection. These findings are supported by the data showing the extent to which relatives, the hospitals, public agencies, and others—apart from insurance—participated in financing the hospital care of aged persons.

It is widely believed that older persons are not receiving the amount of hospital care they need. This is difficult to test objectively, because need is hard to measure. However, if the admission rates for insured persons do not reflect substantial overhospitalization, the much lower admission rates for noninsured persons probably reflect underhospitalization, not only among select groups like the farm residents and the nonwhites, but also among the noninsured generally because as a group they probably have more illness and need more care.

If the aged, and especially the three-fourths among them who were not insured, were not receiving all the hospital care they needed in 1951, the implications are very important because their utilization rates were considerably higher than the rates of 10, 15 or 20 years earlier. Will the trend toward still higher levels continue? Should it? Or should more of the care received by the aged, especially by the long-term cases, be of a less elaborate and less expensive kind, whether in institutions designed for bed care, in clinics for ambulatory patients, in doctors' offices, or in patients' homes?

The comparison of the survey findings with those from various other experiences emphasizes that geographical location and factors of population selection radically affect the utilization rates. There are some indications that the hospitalization rates are lower when prepayment applies to a broad spectrum of medical services, and not merely to hospital care. If this observation is supported by further experience, it suggests an opportunity for future reduction in the cost of hospital care, without sacrifice of adequacy, by expansion of outpatient, office, and supervised home care of the aged.

The data from old-age assistance experience remind us that the economically neediest among the aged are probably also the medically neediest, and that the amount of hospital care furnished them has been determined largely by available public funds. More nearly adequate provision for public assistance cases throughout the country could involve large additional tax funds. Public assistance methods and practices in regard to hospital care therefore deserve close study, so that there will be maximum economy without sacrifice of quality.

Finally, a few comments on some implications of the data concerning insurance and financing. Only one-fourth of the aged had some hospitalization insurance in March 1952. And those who had some, had far less than comprehensive insurance protection—witness their frequent use of other methods and resources to help pay hospital bills. Voluntary insurance may further expand enrollment among the aged and the comprehensiveness of the protection afforded. But the retired status of large proportions of the aged, and the meager financial resources of most of them, suggest limits beyond which self-supporting voluntary insurance may not be able to go in providing the aged with financial security against hospital and other costs of illness.

One alternate recourse is public subsidy of current insurance premiums for the aged; but this would involve large amounts of public funds, would call for public standards and accounting, and might be difficult to develop.

Another and perhaps more logical recourse is paid-up hospitalization insurance for those who withdraw from the labor force, and their dependents, and for those still able to work but approaching retirement. If this were provided, the aged would have paid-up insurance for hospital costs just as, under old-age and survivors insurance or other systems, they have paid-up insurance to provide income with which to purchase necessities of life that can be budgeted by individual families.[5] In financial terms, such paid-up insurance implies premium payments during the working lifetime large enough to pay for post-retirement as well as for current hospitalization insurance protection. In economic terms, it implies earmarking a portion of current national product for the health services of the aged.

Whatever is done for the future health care of the aged should have regard for economy as well as quality in the hospitalization practices that determine costs; and, at the same time, it should achieve effective as well as equitable allocation of the costs among groups of people and over periods of time.

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[5] Since this paper was presented, the President's Commission on the Health Needs of the Nation has released its report (December 18, 1952), recommending that "Funds collected through the old-age and survivors insurance mechanism be utilized to purchase personal health service benefits (i. e., hospital and medical care) on a prepayment basis for beneficiaries of that insurance program, under a plan which meets Federal standards and which does not involve a means test." (Vol. 1, p. 48.)

11. RECOMMENDATIONS OF THE COMMISSION ON FINANCING OF HOSPITAL CARE, 1954, FOR THE AGED GROUP AND THE PUBLIC AID GROUP

The Aged Group

The proportion of the population in the older age brackets is rising steadily and will exceed 9 percent of the total population by 1960. As of June 1952, the 8.5 percent of the population 65 and over represented approximately 13.2 million persons.

Persons in this age group require more days of hospital care than younger persons, with the exception of women during child-bearing years; yet they are, as a rule, less able to pay for hospital care than other adults.

Less than one-fourth of the aged were employed in June 1952, a time of full employment. Many employed aged have irregular employment. Most of the employed aged were men. Only 1 out of 10 aged women had a job.

Many millions of the aged are without income from employment. Approximately two-thirds of the 9.1 million aged who are outside the labor force receive social insurance or public-assistance benefits—with more than half receiving various forms of social insurance and 2.6 million receiving old-age public assistance. The likelihood of this retired group improving its economic status by engaging in gainful activity is remote.

There is a sharp upward trend in the proportion of the aged receiving social insurance benefits and this trend can be expected to continue. About 7 out of 8 employed persons are working in jobs which are covered under social insurance programs for old age or survivors protection.

The income and assets of the aged are low when considered from the standpoint of a modest standard of living.

Census Bureau data for 1950 showed that—

> Of unrelated persons[1] 65 and over, 90 percent had money incomes of less than $2,000 and 40 percent had money incomes of less than $500.
>
> One-fourth of all families with money incomes of less than $2,000, and one-third of those with money incomes of less than $1,000, were headed by aged persons. The median income of 1950 for all families was $3,319, while for families headed by persons aged 65 and over it was $1,903.

A nationwide survey made by the Social Security Administration indicates that about three-fourths of elderly couples and individuals receiving old-age and survivors insurance in 1951 had less income than required for the minimum budget for urban aged couples established by the Bureau of Labor Statistics. Although the aged population of

[1] An "unrelated person" is one not living with a relative.

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the country is predominantly urban, 21 percent live in rural nonfarm areas and 15 percent on farms. The cost of living is, of course, generally higher in urban than in rural areas. The survey found that 26 percent of the aged had some form of prepaid protection against the cost of hospitalization. (57 percent of the general population were covered.)

The 9.1 million aged without income from employment have relatively more disability and illness than the 4.1 million aged, including aged dependents, who receive income from employment.

Short-term general hospital utilization—in terms of hospital days per 1,000 persons—by all the aged is almost 50 percent higher than utilization by the general population and 70 percent higher for the 9.1 million aged outside the labor force.[2]

An aged unemployed person hospitalized in 1952 in short-term general hospitals, for the average length of stay of 25 days at a cost of $18.35 per day, the reported national average, would incur a hospital bill of about $450. This would represent a half or more of annual income for the 64 percent of the aged receiving OASI benefits, who have money incomes of less than $900.

Public Aid Group

To the extent that specific provisions are not developed to finance hospital care for such groups as the aged and the unemployed tax relief funds must finance hospital care for persons forced to seek help from public welfare agencies in paying for their hospital care.

As of December 1952, approximately 5.6 million persons—3.6 percent of the population—were dependent on some form of public assistance or relief. In many communities, State and local funds for purchase of hospital care for these persons were either insufficient or nonexistent.

Present provisions under the Social Security Act for payments directly to hospitals (for old-age assistance, aid to dependent children, aid to the blind, and aid to the permanently and totally disabled) are ineffectual in most States and communities because the cost of hospital care cannot be included within the maximum grants allowable for eligible individuals and because of insufficient State and local funds to match Federal funds.

General assistance caseloads in the counties vary in relation to the amount of unemployment. If there were a substantial increase in the number seeking public aid because of increases in unemployment, the resulting economic burden would be greater than many communities could meet because in most communities, public relief funds are insufficient to meet the full budgeted needs of the indigent group.

Almost half of the indigent group are 65 years of age or older.

Loss of employment and insufficient earnings for reason of illness are the most important causes of dependency on tax funds.

In States where hospital care is financed primarily from local relief moneys it is frequently financed on an inadequate basis or not at all because of the insufficiency of funds.

The insufficiency of funds which characterizes public-aid financing for the indigent groups necessitates, in most communities, that priority be given to food, clothing, and shelter needs rather than to hospital-care needs.

[2] Days of hospital care per year for persons 65 years and over is estimated at 165 per 1,000 persons as compared to 112 days per 1,000 persons for the general population.

Inadequate financing of hospital care for indigents arises primarily because of reliance on local government tax resources for this type of relief. Local units of government frequently lack fiscal ability or willingness to meet their obligations to the needy for financing hospital care as well as for financing other essentials of life.

The size of public aid grants given individuals and the extent that public responsibility is assumed for payments to hospitals for needy persons tend to vary in direct relation to State and local fiscal ability.

Recommendations and Guiding Principles

THE AGED AND PERMANENTLY DISABLED

The vast majority of the unemployed aged and permanently disabled are unable to purchase prepaid hospital care from their incomes. Persons who enter this group tend to remain dependent on tax funds for payment of their hospital care throughout life. Without assistance in paying for hospital care these persons often will not receive the care they need.

Improved methods of financing hospital care for this group might be accomplished by a combination of the following:

1. Encouraging employers to make provision for coverage of retired employees under voluntary prepayment plans as a part of their pension programs.

2. Inclusion of a provision in the Federal old-age and survivors insurance program for hospitalization protection for needy beneficiaries receiving monthly income maintenance benefits under this program, provided:

(*a*) That the certification and administration of funds for hospital benefits be the responsibility of State and local agencies; and,

(*b*) That the protection be provided by the local administering agency through purchase of voluntary prepayment from OASI funds or by direct payments to hospitals on a reimbursable cost basis from such funds.

This recommendation was adopted with E. J. Faulkner dissenting as follows:

> Commission Member E. J. Faulkner dissented from this recommendation for the following principal reasons:
>
> 1. If the means test is used to establish need for financing hospital protection for OASI beneficiaries, the proposal is unlikely of enactment because of congressional disinclination to include any means test in the OASI system. On the other hand, if the means test is not included many OASI beneficiaries who do not need help to finance hospital care will receive an unneeded subsidy from the taxpayer. Should the means test be included, it is contended that it would be more efficient and economical for Government to pay the costs of hospital care for such recipients directly rather than incorporating it in the OASI mechanism.
>
> 2. If Government, through OASI, subsidizes hospital care for OASI beneficiaries, precedent will have been established for similar subsidization of all health care costs leading directly to socialized medicine.

3. It is particularly unwise to extend OASI benefits into any new fields at this time in view of the need for radical corrective measures to OASI itself, to prevent social-security costs from becoming ultimately a crushing burden on our economy.

GROUPS DEPENDENT ON PUBLIC AID

After provision is made for the extension of prepayment to the largest possible number of persons, and for improved methods of financing hospital care for the groups now generally unable to pay for care, it will still be necessary to meet the cost of needed hospital care for those persons who receive various forms of public aid.

Local community ability to finance hospital care for persons dependent on public aid varies widely and bears no relationship to the number of persons in the community requiring such assistance or to the cost of their hospital care.

As a possible solution to the problem of improved methods of financing hospital care for persons dependent on public aid, the following is proposed:

Indentifiable Federal grants to States and localities on a variable matching basis for the specific purpose of financing hospital care for the indigent group provided that: [3]

1. Methods for allocation of funds to States take into account State fiscal resources, number of persons in the State needing assistance in financing their hospital care, and cost of hospital care in the particular State.

2. Methods of administration of funds should provide for a maximum of local administrative responsibility, under standards which assure economical and effective use of funds.

3. Grants to States be made for a limited period of time as an incentive to localities and States to develop more adequate financial and administrative arrangements. Hospital care thus financed might be purchased through voluntary prepayment agencies, if found practicable, or by direct payments to hospitals on a reimbursable cost basis.

4. Federal funds be made available to the States to support programs designed to explore the possibility of bringing the nonwage or public-relief group under voluntary prepayment plans.

5. An appropriate State program under which funds will be administered exists or is established by the responsible State agency.

Statement of Stanley H. Ruttenberg, Director, CIO Department of Education and Research, Differing From Conclusions of the Commission on the Financing of Hospital Care, January 6, 1954

SUMMARY OF REMARKS

The program recommended by the Commission unfortunately contains two major weaknesses: first, costs of belonging to voluntary

[3] Dr. Walter B. Martin wished to record his conviction that the principle set forth in item 4, should apply to this recommendation. This item reads:

"4. Even though Federal funds may be necessary for experimentation in developing methods for improved financing of hospital care for persons in the low-income ('medically indigent') group, it is recognized that a method of measurement to determine eligibility for such assistance cannot be established on a national basis for application throughout the country but must be established and administered in the local community. Such a definition must necessarily take into consideration family size and economic needs in relation to family resources and other factors that cannot be measured except on a local basis. (Dr. Walter B. Martin wished to record his conviction that the principle set forth in this point should apply whenever Federal funds are used in connection with hospital care for the 'medically indigent.')"

prepayment plans would continue to be too high for a large segment of the population, including many who are gainfully employed; and second, the alternative offered to the substantial group of persons not covered would involve a means test. These weaknesses arise from the failure of the Commission to consider and recommend a comprehensive system of social insurance covering the costs of hospital care.

Even within the framework of the voluntary approach, with the many problems outlined, the Commission's recommendations place too much emphasis on action at the community level.

Recognition should also have been given to broad methods of reducing the need for hospital care, such as programs for making preventive medical care available at a reasonable cost to all groups in the population, and a wide variety of measures that would help to eliminate substandard levels of living, such as extension of minimum wage laws and public housing.

FULLER EXPLANATION

The first weakness results from an outstanding characteristic of the voluntary approach, namely that members are charged the same amount regardless of differences in earnings. Insurance companies are not permitted by law to adjust to income levels, and most cooperative hospital plans such as Blue Cross likewise charge flat rates without relation to earnings.

The Commission's recommendations attempt to meet the needs of certain low-income groups through extension of protection during periods of unemployment and disability. However, the costs of such extension would be added to regular charges. Some of the recommended improvements in benefits would likewise tend to add to costs, so that charges would presumably not be reduced in spite of other economies that might be achieved.

While such improvements are desirable, high membership rates would inevitably continue to keep out many persons who have small incomes compared to their needs. This group is a very large one, including many families with incomes above the $2,000 figures mentioned in the report.

It is not enough to recommend that funds "be made available to explore methods for assisting families and individuals with low incomes (i. e., the medically indigent) to purchase prepayment for hospital care." The report should have recognized existing successful experience with social insurance covering hospitalization.

An adequate analysis of obstacles to extension of membership in voluntary plans should also recognize that in many places hospitals discriminate against minority groups through segregated, inferior, and insufficient facilities. Persons belonging to these minorities therefore find membership in voluntary prepayment plans less meaningful and therefore less attractive. Since persons in minority groups often have low earnings, a large proportion of them would suffer especially from the weaknesses of the Commission recommendations, especially in communities which do not apply an equal standard in connection with the means test.

One of the basic advantages of social insurance, as exemplified by old-age and survivors insurance, is that contributions equal a certain

percent of earnings in covered employment, so that low-income families do not have to pay as much as those which are better off. The individual, moreover, is not expected to contribute the entire amount. The cost is considered partly a social responsibility, and an equal contribution is levied on employers to help meet it. Social insurance thus makes benefits available at a reasonable cost to all those in covered employment without a means test. The coverage is made compulsory to assure protection to all and to avoid adverse selection of risks. Social insurance thus offers advantages in low cost and comprehensiveness of protection not matched by any program for voluntary plans.

A constructive program should be based on receipt of necessary hospital care as a matter of right, without examination of means, both to safeguard human dignity and to assure that care is in fact available when required. The Commission's recommendations would apparently lead to use of a means test for those considered medically indigent. While this matter is not dealt with explicitly in connection with the general recommendations, it is implied and is consistent with common hospital practices of investigating patients' incomes. The recommendation in regard to extension of hospitalization protection to persons receiving benefits under old-age and survivors insurance specifically refers to use of a means test. It is highly undesirable to start mixing this approach with social insurance.

The Commission on Financing of Hospital Care was an independent nongovernmental agency sponsored by the American Hospital Association. It was established in late November 1951 to function for a 2-year period. Funds for the commission's study were made available by grants from the Blue Cross Commission of the American Hospital Association, Health Information Foundation, John Hancock Mutual Life Insurance Co., W. K. Kellogg Foundation, Michigan Medical Service, Milbank Memorial Fund, National Foundation for Infantile Paralysis, and the Rockefeller Foundation.

Members of the Committee on Nonwage and Low-Income Groups responsible for the recommendations here included were:

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James R. Cameron, D. D. S.
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12. RECOMMENDATIONS OF THE COMMISSION ON CHRONIC ILLNESS ON THE CARE OF THE LONG-TERM PATIENT

American Cancer Society
American Dental Association
American Heart Association
American Hospital Association
American Medical Association
American Public Health Association
American Psychiatric Association
Arthritis and Rheumatism Foundation
Muscular Dystrophy Association
National Foundation for Infantile Paralysis
National Multiple Sclerosis Society
National Tuberculosis Association
New York Foundation
Public Health Service

General

1. Care of the chronically ill is inseparable from general medical care. While it presents certain special aspects, it cannot be medically isolated without running serious dangers of deterioration of quality of care and medical stagnation.[1]

2. Care and prevention are inseparable; the basic approach to chronic disease must be preventive, and prevention is inherent in adequate care of long-term patients. Persons and institutions assuming care of the long-term patient have an obligation to apply early diagnosis and prompt and comprehensive treatment of the whole patient to prevent or postpone deteriorations and complications which may produce or aggravate disability.

3. Rehabilitation is an innate element of adequate care and properly begins with diagnosis. It is applicable alike to persons who may become employable and to those whose only realistic hope may be a higher level of self-care. Not only must formal rehabilitation services be supplied as needed, but programs, institutions, and personnel must be aggressively rehabilitation-minded. (A report by the American Medical Association on rehabilitation appears in volume V of this series.)

4. Recognition should be given to the importance of the emotional attitude of those whose illnesses become long drawn out, permanently crippling or in other ways a major frustration. These attitudes embrace morale, motivation, and mood. Personnel in institutions and at home, including the patient's family, must constantly seek to help the patient to endure pain, delay and disappointment, faithfully follow difficult treatment regimes, keep hope alive, maintain a "will to live" and develop a philosophy of acceptance as part of a mature faith. Program planning, schedules, activities, and architectural considerations must bear these points in mind.

[1] Planning for the Chronically Ill. See Journal of the American Medical Association, 135:343, October 11, 1947; American Journal of Public Health, 37:1356, October 1947; Public Welfare, 5:218, October 1947.

5. The Commission on Chronic Illness recognizes that the mental illness problem permeates the entire field of care of the long-term patient. An overall attack on all aspects of the problem is long overdue. The Commission commends the Council of State Governments for its comprehensive 1950 recommendations concerning State mental health programs[2] and the governors for the vigor with which they have undertaken to turn the recommendations into action.[3] States are urged to continue and accelerate these efforts. But State government action is not enough. Private individuals, and organizations must be brought into a coordinated effort with city, county, State, and Federal experience. The Commission believes that there is great need for continued emphasis on the development of comprehensive communitywide preventive programs in the mental health field.

6. The cost of programs to provide care to long-term patients should be measured first in terms of human values, of effectiveness, and of productivity. The most economical care is that which returns a person as quickly and as fully as possible to the highest attainable state of health and social effectiveness. Practices in conflict with this conclusion must be eradicated and procedures consistent with it substituted.

7. With full appreciation of the necessity for adequate institutional facilities, and realizing that some areas do not have such accommodations and should provide them, the Commission nevertheless feels that henceforth communities generally should place the greater emphasis on planning for care in and around the home.

8. Hospitals, outpatient departments, health departments, nursing organizations, and others furnishing the specialized services required by the long-term patient should reexamine their policies and practices to assure the long-term patient the best of modern medical care. This reorganization should be in the direction of strengthening the personal relationship of physician and patient, bringing the doctor aid and not attempting to substitute the agency for the personal physician.

9. Adequate care of the long-term patient requires arrangements which promote frequent evaluation of patient needs and easy flow back and forth among home, hospital, and related institutions.

10. Coordination and integration of services and facilities are so valuable in promoting good care for the chronically ill that all who are concerned with the long-term patient have an obligation to support and further arrangements to this end.

11. No pattern for organizing services is satisfactory for all communities. Programs of necessity must be tailored to fit local situations taking full account of what is good in existing resources for care at home or in an institution. Planning should be based on facts—both local and regional—as to needs, density of population, financial capacity, and types of illnesses and accidents likely to prevail.

12. Planning and programs must be directed to the needs of all long-term patients and not limited to those of any special economic, racial, cultural, or other segment of the population. Planning for all long-term patients must, however, take into account the services now available to special groups such as veterans, fraternal, and others.

[2] The Mental Health Programs of the Forty-Eight States. The Council of State Governments, Chicago, Ill. 1950.

[3] Governors' Conference on Mental Health, State Government, March 1954.

13. A significant but unknown number of the 5.3 million persons estimated to be long-term patients are exservicemen and women. Of the total service to long-term patients, a considerable proportion is provided by the Veterans' Administration. Congress is urged to take necessary action to clarify fully the Federal responsibility to veterans who are long-term patients, and in doing so to be mindful of the community need for integrating programs for care of all chronically ill patients.

14. Personnel shortages in the professions concerned with the chronically ill remain so serious as to constitute a major block to improvement of care. The number of personnel must be increased by better recruitment, assistance with the costs of education, better salaries, and other inducements to enter and remain in practice. This is particularly applicable to the classes of personnel associated with physicians in patient care.

In addition, changes in curricula for undergraduate, graduate, and postgraduate education are needed to produce personnel interested in and equipped to care for long-term patients.

15. Since health is of paramount importance both to individuals and to the strength of the Nation, investigations of diseases and their origins and studies of the needs and resources for maintaining and improving health should command a high priority in the spending of research funds. In the past half century research has led to unparalleled advances in improving human health. These achievements give us confidence in the dividends that will accrue from continuing basic and applied research in the biological and medical sciences. In order to increase as well as extend the application of knowledge gained from such research, laboratory and clinical investigations must be correlated with intensive and extensive research designed to measure the dimensions of the chronic disease problem and to reveal the most appropriate and effective methods and procedures for meeting those problems.

As guides to methods of organizing, administering, coordinating, and evaluating health services for the chronically ill, research efforts must be extended in four relatively neglected fields of inquiry, to ascertain (1) the distribution and severity of illness in various population groups; (2) the association of long-term disability with social, economic, genetic, and familial factors; (3) the origins and development of health attitudes and practices that influence people to utilize available health resources; (4) the availability, organization, administration, public acceptance, and effectiveness of various kinds of health services within individual communities.

Institutions educating people for the health professions or the social sciences should cooperate with other community agencies in all four of these fields of investigation. They should also give adequate instruction in the significance and techniques of classifying diseases, assessing health conditions, and appraising the effectiveness of health services.

16. Financing long-term illness poses a mosaic of problems: their magnitude defeats the efforts of most individuals; and their stubborn complexity has up to now confounded the efforts of the community.

(*a*) The financial burden created by chronic illness may be and often is beyond an individual's capacity to meet. The long-term patient has two related financial problems: maintenance of income; and payment of the medical and other expenses resulting from the illness.

A realistic solution to the first of these problems will ameliorate—but cannot be expected to resolve—the second. To enable the patient more nearly to meet both problems, present means of dealing with them must be improved and extended and new methods developed.

(*b*) The need for community participation in financing long-term care is recognized, but the community's problem has yet to be solved. This problem has two facets, both of which the community must face promptly and forcefully. Care of the long-term patient is not adequately financed from any source, and much of the money now available is inefficiently expended on uncoordinated and overlapping services. More money is needed; and all funds must be used in ways which will make better care available to more long-term patients.

The Patient at Home

17. Most long-term patients can best be cared for at home during much of their illness and prefer care in that setting under supervision of their personal physician. In spite of this, community planning continues to underemphasize such care. Comparatively little effort has been made to organize and provide the means whereby physicians can obtain for their patients the variety of services required to meet the diversified and complex needs that arise in long-term illness.

18. It is imperative that the patient's personal physician participate as continuously as possible in the medical care of each patient at all stages of illness. The physician determines the nature, time, and place for the patient's diagnostic workup and therapeutic services. The physicians, therefore, must equip themselves with knowledge of new methods of treating long-term illness; learn to use other health professions in care of the patient; and become familiar with community resources that offer the various services the patient may require.

19. In addition to physician services, long-term care for many patients—though by no means all—requires nursing, dental, social work, nutrition, homemaker, housekeeper, occupational therapy, physical therapy, and other rehabilitative services. In most communities these services, except nursing, are not yet available for the patient in his home. Communities are urged to make these services available and to develop methods to acquaint professional groups and the general public with them.

20. Planning to improve care of the long-term patient at home should be part of a community's general health-care program. Such planning must take into account the fact that for some patients care at home may precede, follow, or be interspersed by care in a hospital or other institution.

21. Adequate housing is a fundamental requirement for the care of patients with long-term illness or disability. Community planning for such care must therefore take cognizance of housing needs.

22. The role of the outpatient department in meeting the needs of the chronically ill requires clarification. In most instances a general reorganization of these departments is required to provide the continuity which is so important in the care of the long-term patient. This applies both to departments where the clinic physician temporarily stands in the role of personal physician and those in which he serves as consultant, furnishing special diagnostic and treatment services to amplify the medical care given by the patient's doctor.

The outpatient department must (*a*) provide services in ways that preserve the dignity and respect the convenience and comfort of the person and which will encourage him to retain a large measure of responsibility for his own health; (*b*) keep alive the doctor's interest in his patient, and the patient's respect and confidence in his physician; and (*c*) eliminate fragmentation of patient care into small specialty interests, thus lessening confusion to the patient, the physician, and the entire clinic staff.

Too few outpatient departments have as yet realized the opportunity to provide diagnostic and specialist treatment services needed by practicing physicians for management of selected patients.

23. Home care programs organized to provide auxiliary services to the private physician offer the most effective method yet devised for bringing to long-term patients and their families the coordinated services required. Up to now they have usually been limited to only a few physicians in a community and for their needy patients. The experience of these programs should be utilized to devise ways to bring integrated auxiliary services to any physician for persons in all economic groups. To be successful, an organized home-care program must have these essential characteristics: Centralized responsibility for administration; coordination of services and resources; and the development and use of the patient-care team to deal with the health needs of the patient.

The Patient in an Institution

ALL INSTITUTIONS CARING FOR LONG-TERM PATIENTS

24. If the long-term patient cannot be satisfactorily treated while residing in his own home, he should be transferred to an institution that affords him the kind of services most appropriate to his current need. He should not be maintained in a high-cost facility when a less expensive one is available to serve his needs as well or better.

25. A wide range of institutional services is needed. Under current practices these are provided in varying amounts and patterns by the following types of institutions: General, chronic disease, mental and tuberculosis hospitals, special rehabilitation institutions, nursing and convalescent homes, and homes for the aged. Many communities cannot afford and are not justified in maintaining all of the personnel and physical facilities involved. For them, the Commission recommends (*a*) a drastic rearrangement of functions and relationships of existing institutions; (*b*) procurement of some needed services on a regional basis; (*c*) a combination of these procedures.

26. It is incumbent upon all institutions—individually and as a group within the community—to see that their policies and practices regarding long-term patients are carefully framed and meticulously carried out in the interest of the patient. The standards of care for this group must be brought up to that of care given to persons with acute illness. Among the most important areas needing attention are these:

(*a*) *Medical supervision.*—Every institution has a responsibility to insure that all patients have adequate medical supervision, including proper examination at admission and periodic reevaluation. Policies and practices should not preclude maintenance of the patient's personal physician's role in the patient's care.

(*b*) *Admission and discharge policies.*—A hospital should not exclude capriciously or arbitrarily because of diagnosis (terminal cancer, paraplegia, poliomyelitis, tuberculosis, psychosis, etc.) patients who can benefit from the care it offers. However, no institution should admit patients whose essential care requirements it is not prepared to meet. A hospital which cannot meet the requirements of a patient seeking admission should aid that patient in finding a suitable source of care. No institution should discharge patients in the absence of a care plan designed to assist the patient in maintaining his gains and avoiding exacerbations.

(*c*) *Professional and administrative arrangements among institutions.*—These should be such as to facilitate easy transfer of patients from one to another in accordance with patient needs; and should encourage the greatest possible continuity of care. Cooperative arrangements should extend to community health activities involved in providing care at home.

27. Additional acceptable beds are needed especially for long-term patients who have achieved the fullest benefit from active medical treatment but still need skilled nursing care in an institutional setting.

HOSPITALS

28. The most desirable approach to providing hospital care to long-term patients is through extension, organization, and coordination of the facilities and services of general hospitals both private and public. In some general hospitals this will require only an extension of the hospital's responsibility and reorientation of the staff so that diagnostic and therapeutic services—disproportionately dedicated to acute illness—will be appropriately and adequately applied to the chronically ill. In many other hospitals additional beds will be needed and personnel, space, and equipment required to provide specialized services to the long-term patient. In all general hospitals the concept, philosophy, and practice of rehabilitation must be paramount.

(*a*) *Short-term care of the chronically ill in a general hospital.*—All general hospitals should devote an appropriate share of their services to long-term patients. The general hospital—of whatever size—which cannot accept responsibility for both short-term and long-term care should extend to the patient with a chronic disease these services which are likely to be short-term: services for diagnosis and treatment of intercurrent acute illness; evaluation of the need for services not provided by the general hospital, or better or more economically provided in other types of institutions; and the development of a plan for continued care. The trend of extending psychiatric services in general hospitals, for treatment as well as diagnosis, should be encouraged.

(*b*) *Long-term care in a general hospital.*—General hospitals should provide adequate units and services for patients requiring prolonged periods of care.

The large general hospital is urged to equip itself with the full range of facilities both for the patients needing skilled nursing service and rehabilitation, and with units for those needing less skilled care. A chronic disease unit offering primarily skilled nursing service and physical medicine is recommended for the large general hospitals.

The small general hospital that cannot provide, through its own resources, the full scale of services is urged to make arrangements on a regional basis for services to be available at the small hospital.

29. The independent chronic disease hospital is a second-choice approach to long-term hospital care. It should be considered only when there is no practical way to associate the chronic disease facility physically and administratively with the general hospital. Where a special chronic disease hospital is unable to affiliate itself with a general hospital, it must have adequate facilities and personnel for thorough diagnostic workup, intensive study of the patient, and a dynamic program for definitive medical care and rehabilitation. The construction of new independent chronic disease hospitals (except research institutions) is not recommended.

30. Progress in control of a number of the more serious chronic diseases depends upon research which can be conducted best where substantial numbers of patients can be observed over a long period of time. Chronic disease hospitals and chronic disease units of general hospitals have a unique opportunity to conduct such investigations and should include research among their principal functions.

31. The long-term patient belongs in private general hospitals as well as in tax-supported general hospitals—a combination of voluntary and public effort is applicable to the care of the long-term patient as it is to the care of the acutely ill patient.

MENTAL INSTITUTIONS

32. Every State should survey periodically its mental institutions and plan systematically for improving its services and facilities.

33. The hospitalized mentally ill constitute a major chronic-disease problem for the Nation and merit a comprehensive research effort.

34. Every mental hospital should have an adequate therapeutic program, the primary goal of which is intensive treatment and rehabilitation of the patient and prompt restoration to community life as soon as the need for social restraint is over. A second goal is to improve the lot of the patient who has to remain in the hospital for a prolonged period.

Restoration to community life which is the aim of rehabilitation in the mental hospital demands a close integration with the community resources available to the patient.

35. Not all mental patients needing institutional care require care in a special mental institution. For many of these patients the general hospital offering psychiatric services represents the appropriate source of care.

36. Some long-term mental patients—the patients whose behavior has reached a safe social level—can be adequately cared for in a carefully selected protective setting at home, in foster homes, or in public or private nursing homes provided psychiatric supervision is available. Carefully planned and well-controlled experiments to determine how best to care for these inactive or subclinical mental patients should be continued and additional possibilities explored.

NURSING HOMES AND RELATED INSTITUTIONS

37. Nursing homes and related institutions are essential for some phases of long-term illness. They are presently being operated under a variety of auspices—public; proprietary; and nonprofit voluntary

such as religious and fraternal. Though there are many that are rendering excellent service, too many are operating unsatisfactorily.

Simultaneously and concurrently many of these institutions must yet equip themselves to provide safe and adequate care and become properly alined with other community resources serving the chronically ill. Only when this is accomplished can they fulfill their role acceptably and solve the problem of many long-term patients who otherwise must resort to inappropriate—and probably more expensive—care.

Individual physicians, medical societies, and hospital staffs particularly are urged to recognize the nature of the contribution which care in nursing and convalescent homes and homes for the aged can make and to help bring about the necessary reforms.

38. On the basis of its studies and analysis of the problems, the commission believes that development of these institutions as elements of general hospitals is one of the best ways of raising standards, and recommends this arrangement. When outright affiliation is impossible, a close and active working relationship should be maintained.

39. Standards of medical, nursing, and personal care in many of these institutions are not acceptable and must be raised. Two major factors are involved: (*a*) knowledge of what to do and how to do it; (*b*) better financing.

(*a*) *Knowledge of what to do and how to do it.*—The Commission on Chronic Illness endorses and commends the nursing home standards recommended by the National Social Welfare Assembly's committee on aging in 1953, and the suggested procedure for establishing and maintaining them.[4]

Through educational programs and proper exercise of their jurisdiction, licensing and standard-setting authorities can effect great improvements in physical facilities and care in nursing homes and related institutions. Recent legislation [5] and the knowledge resulting from recent studies of patients and institutions [6] have produced an unprecedented opportunity for progress in this field. Licensing and standard-setting authorities are urged to move vigorously to take advantage of this auspicious situation.

(*b*) *Better financing.*—Financing is probably the most neglected and unresolved area in improving care in the bulk of nonhospital institutions. The efforts of licensing authorities and nursing home operators to apply new knowledge and otherwise raise standards can succeed only if better financial support is forthcoming for these institutions, particularly the ones that are financed largely through public assistance. To provide a sounder financial basis for nonhospital institutions and the improvement of their standards, the commission recommends that—

Private insurance and prepaid medical and hospital plans extend the scope of benefits offered to include this type of service.

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[4] Standards of Care for Older People in Institutions: Sec. I, Suggested Standards for Homes for the Aged and Nursing Homes; Sec. II, Methods of Establishing and Maintaining Standards in Homes for the Aged and Nursing Homes; Sec. III, Bridging the Gap Between Existing Practices and Desirable Goals in Home for the Aged and Nursing Homes. Published by the national committee on the aging of the National Social Welfare Assembly under a grant from the Frederick and Amelia Schimper Foundation, 1953, 1954.

[5] 1954 Amendments to Hospital Survey and Construction Act (Public Law No. 482, 83d Cong.) and 1950 Amendments to Social Security Act (Public Law No. 734, 81st Cong.) relating to licensing and standard setting in nursing homes.

[6] Solon, Jerry, and Baney, Anna Mae. Inventory of Nursing Homes and Related Facilities. Public Health Reports, 69:1121–1132, December 1954. Solon, Jerry and Baney, Anna Mae. Ownership and Size of Nursing Homes. Public Health Reports, vol. 70, No. 5, May 1955. Solon, Jerry and Roberts Dean W., M. D. Patients in Proprietary Nursing Homes in 9 States. Modern Hospitals, May 1955.

Philanthropic agencies—national voluntary organizations devoted to specific disease categories, community chests, united funds, religious and fraternal groups, for example—consider this type of service as a need that deserves support commensurate with other types of care.

Responsible authorities make sufficient funds available to enable public agencies operating such facilities or purchasing this type of care to expend sufficient amounts to assure the quality of care required.

Tax funds be sufficient to support a program of inspection, licensing, education, and supervision.

Coordination and Integration

40. The long-term patient's needs demand that in every community there be a means for coordinating the services the chronically ill require. The size of the community and other factors will determine whether this means be formal or informal, an agency, a committee, or a group. Whatever the means, the responsibility is twofold: to participate in long-range planning so that the long-term patient's interests will have fruitful consideration in community development; and by improving working relationships among existing agencies, to help patients get day-to-day care they need.

41. Counseling and referral service is indispensable to effective use of community resources. Information concerning available sources of care, while of value, is not enough. There must also be competent advice and consultation to insure that patients find the services most nearly suited to their needs.

42. In connection with its overall health and welfare activities, each State government should designate an agency to coordinate and develop official programs for care of the long-term patient. The functions of this agency should include consultation and financial assistance to local communities in developing and improving their own services; promotion of the regional approach to make the resources of urban centers more readily available to rural areas and small communities; and promotion of specific administrative techniques which have proved valuable in coordination.

43. National voluntary agencies established to combat specific diseases should intensify their efforts to encourage their local chapters to recognize the common denominators in the care of the long-term patient irrespective of diagnosis. Collaboration to the fullest extent is essential: for example, sharing of quarters and jointly operating programs.

Personnel and Education

44. Shortages of well-trained health personnel to care for long-term patients are more critical than the personnel shortages in other areas of care. These shortages can be accounted for, in part, by the following:

(*a*) In our culture, there exists a phenomenon of rejection of the aged and disabled. This phenomenon is manifest among the general public and the professions alike. It affects individual attitudes toward prevention and treatment as well as group attitudes toward responsibility for developing and financing programs for care.

(*b*) The belief is widely held among the health professions that care of long-term patients is uninteresting, unlikely to produce much improvement in the patient's physical and mental state, and therefore less rewarding than work with acutely ill short-term patients; this belief is held despite advances in medicine, including modern concepts of rehabilitation that have radically changed the outlook for restoring the capacity of many long-term patients to useful, happy lives.

(*c*) The work is often physically taxing, and frequently may be distasteful and discouraging.

(*d*) Many of the long-term facilities are poor and shoddy and lack necessary equipment. Frequently they are located in isolated, unattractive areas where living quarters for the staff are hard to find and public transportation is not available.

(*e*) Pay scales are usually low, the numbers of staff insufficient, and workloads heavy.

Measures must be adopted to counteract these influences that interfere with the development and maintenance of a supply of personnel which will elevate the standard of care of the chronically ill to that given to persons with acute short-term illness.

45. Training and recruitment programs to alleviate current shortages and to avoid even more serious future deficits must be built upon and must validate the Commission's primary objective: a dynamic approach to chronic illness that will prevent such long-term disability, minimize its effects, and restore many of the disabled to a useful and productive place in the community. Wider recognition by the public and by the health professions that care of the long-term patient is potentially a most rewarding and dramatic service to humanity will counteract tendencies to reject the disabled, the aged, and infirm. This wider recognition can best be achieved by effective action and demonstration programs that are begun and carried on in spite of the acknowledged difficulties.

46. Many kinds of health personnel are essential for care of the long-term patient. These include personnel primarily concerned with—

(*a*) Medical management, such as physicians and dentists.

(*b*) Provision of nursing and attendant services, such as professional and practical nurses and trained hospital attendants.

(*c*) Provision of specific technical services, such as occupational and physical therapists.

(*d*) Provision of spiritual and psychological aid, such as trained religious workers and those trained in the field of psychology.

(*e*) Provision of services for the social and economic welfare of patients, such as trained social workers and vocational counselors.

(*f*) Responsibility for the organization and administration of health services and programs designed for the care of chronic illness, such as hospital administrators and various types of public-health workers.

Personnel in many of the categories listed are in short supply. In other cases the problem is mainly one of distribution. These problems of distribution and shortage are more acute in rural and small communities than in cities.

47. Greater inducements must be provided to interest students in undertaking training in the fields where they are needed; and to maintain the supply of workers in these fields. The following specific steps are recommended:

(*a*) Recruitment programs should be pursued vigorously along the lines of those undertaken by the National Health Council and a number of other professional and health organizations.

(*b*) Private and public funds for scholarships and stipends to encourage young people to enter schools training health personnel must be greatly increased.

(*c*) Communities should find out how many trained professional and technical health workers are not now employed in their professions, learn what is needed to attract them to the field, and organize active recruitment programs to draw them back into appropriate employment.

(*d*) Existing agencies and facilities should organize to make more effective use of personnel. The emphasis should be placed on personnel functions and services but the importance of physical facilities and equipment should be remembered, for satisfactory working conditions and surroundings affect staff morale.

(*e*) Agencies and institutions should review the nature, emphasis, and objectives of their programs. Programs that emphasize restoration of the patient's full potential, programs in which the patient and staff cooperate in the struggle for maximum development of the patient's residual capacities give emotional satisfaction to the worker and thus attract and hold staff more readily than programs which are static and custodial.

(*f*) Job satisfaction must be material as well as spiritual. Those who serve the long-term patient must receive adequate monetary compensation for their services.

48. Education for some classes of health personnel—particularly physicians and nurses—must be reoriented at undergraduate, graduate, and postgraduate levels. There is great need to balance instruction in the characteristics and treatment of short-term illness by placing equal emphasis on long-term illness. The characteristics of long-term illness require:

(*a*) That the student gain full appreciation of the psychological and social factors that affect and are affected by long-term illness. in his training and experience, the student should see the patient in relation to his family and community, and should learn to use community resources in helping to meet the patient's economic, social, and spiritual needs.

(*b*) That students have opportunities to observe and serve patients over a period sufficiently long to become fully aware of the changing nature of most long-term illness and to learn how to help the patient and his family through the various phases leading to maximum use of his capacities.

(*c*) That there be training in the team approach to patient care. The curricula should include courses which emphasize the methods by which the various disciplines can and must work together in the care of long-term patients. Students in medicine, nursing, social work, physical therapy, occupational therapy, and other fields should have practical experience in jointly planning and carrying out patient care.

(*d*) That students gain appreciation of the importance of continuity of care and the coordination of services to patients in their own homes, in nursing homes, in outpatient departments, and in rehabilitation centers.

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(*e*) That educational experience be offered in settings other than the hospital. Most long-term patients are cared for outside the hospital, yet most physicians and many other health personnel have their formal education in hospitals. Students should have experience in all the settings in which patients receive care, including their own homes.

49. Some universities have made real progress in recent years in providing the educational experience outlined above. All professional schools should review their curriculums to see how this experience can best be woven into the course of study.

50. Associations which are concerned with curriculum improvement can be important instruments in reorienting professional education to bring to students modern concepts for care of long-term patients at home and in institutions. We urge that the Association of American Medical Colleges, the Association of Schools of Public Health, the American Medical Association, the American Psychiatric Association, the National League for Nursing, and other appropriate groups continue and expand their efforts to be of assistance in bringing about the necessary changes.

The Association of University Programs in Hospital Administration is urged to include in its recommended curriculum content that reflects the role of the hospital as envisioned by the commission on chronic illness.

51. The commission further recommends that national and local associations representative of professional personnel in this field continue and increase their educational and interpretive function in relation to the needs of the chronically ill.

For example, we particularly recommend that the State and National hospital associations include in their institutes and publications an interpretation of the full significance of the role of the general hospital in the care of long-term illness; and that the American Public Health Association and American Public Welfare Association continue and extend their programs to interpret to their members the role of health and welfare workers in relation to chronic disease.

52. Foundations and State and Federal Governments have been an important source of funds for improving the quality of instruction in schools training personnel for the various health professions caring for long-term patients. These forms of support must be continued and augmented to permit the fullest possible development and extension of experiments and demonstrations in this field. Whatever the form, it is paramount that support continue to be given in such a way as not to control patterns of educational policy, standards, and content, but to encourage wise experimentation.

53. General interest in the chronically ill and the aged has been aroused. Vigorous and more effective public education is needed, however, in what to do to bring about the needed reforms. This is an auspicious time for voluntary agencies to render a most valuable public service by making collective use of their resources for such a program of public education.

Research

54. The mechanism should be developed for periodic national surveys on a sampling basis to be conducted to obtain data on the prevalence and incidence of chronic disease, injuries, and impairments;

on the type, severity, and during of the resulting disability; and on the amount and type of medical care received. These studies should permit classification of information for the major categories of disease by sex, age group, employment status, occupation, educational level, family income, and geographic area.

55. Studies should be carried out in depth in a few carefully selected States and communities to collect not only morbidity data but also comprehensive information on (*a*) undiagnosed and nonmanifest disorders and (*b*) the need for and potential value of medical and rehabilitative services. All communities will need to make continuing surveys of the availability and utilization of their health resources.

56. Studies should be conducted to determine the economic burden of chronic disability in terms of the time lost from productive activity, the effect on the family's economic status, and the costs of diagnosis and treatment, including rehabilitation and long-term care. These investigations should be supplemented by studies of the adequacy of personal income, insurance, and community resources in meeting these costs.

57. Demonstration projects and special followup studies should be directed toward analysis and evaluation of the effectiveness of various methods of treatment and rehabilitation and the subsequent status of patients with respect to their capacities for self-support and self-care.

58. Demonstration projects and long-range studies are required to evaluate the effectiveness and costs of various methods of correlating home care; care in hospitals and nursing homes; and preventive, curative, and rehabilitative services in outpatient departments and rehabilitation centers.

59. Universities, insurance companies, employers, health departments, and other organizations should conduct continuing studies of groups of individuals free from recognizable illness over long periods of time in order to gain a better understanding of the natural history of conditions such as hypertension, arthritis, and coronary heart disease. Organizations already doing this type of research should analyze and make available to others the results of their studies.

60. Studies should be made to determine attitudes toward health and health services among families and individuals of different ethnic and occupational groups, educational and income levels, in different geographic locations, and the bearing these factors may have on health status. Knowledge of health motivations and health habits and their origins and development among various groups in various parts of the country can guide the future direction of health education and community action. These studies can also throw light on constitutional, emotional, cultural, and other behavioral factors that may differentiate those persons who remain relatively healthy and vigorous from those who suffer prolonged and serious disability.

61. Essential to progress in prevention and treatment of chronic illness is the accumulation of information on motivations and attitudes underlying willingness and unwillingness to participate in periodic health examinations, mass screening programs, diagnostic tests, and followup services.

Success in rehabilitation and in the treatment of chronic illness depends—more than in the treatment of acute disease—on the will to live, the will to do, and on spiritual values. Also such qualities as confidence, ambition, and an eagerness to keep in the stream of life have a therapeutic value.

Equally important are studies of methods and procedures that will make these services more advantageous to participants. In all events the patient must do his part.

62. Lack of standard definitions hinders progress in numerous areas of long-term care. Adoption and widespread use of comparable terminology is an essential step toward improving the usefulness and meaning of data collected and analyzed for various purposes by health organizations and by persons who investigate needs and resources for care of long-term illness. The commission is gratified that work is being done by national and international groups to clarify—and promote comparability of—the terms used in morbidity statistics, hospital statistics, and reports on medical services. The commission itself has formulated a limited number of definitions for use in its studies and conferences. These definitions should have further tests of their usefulness and applicability.

63. Those who administer health programs should recognize the contributions they can make to knowledge of health needs of patients with long-term illness through maintaining records and making regular reports of services given and on the recipients. Administrators should also conduct—or ask some other agency or group to conduct—periodic evaluations of the effectiveness of their programs and expenditures as measured against the background of program objectives and community needs. In addition, operating programs for the prevention and treatment of chronic illness should have adequate funds and technical resources to maintain and analyze records of operations, so that they may measure the effectiveness and economy of their services. Research design should be built into all action programs in order to permit such periodic evaluations.

64. Some central national agency should serve as a clearinghouse for studies on long-term illness, helping (*a*) to stimulate research—and correlate findings—in the cause, course, and social consequences of chronic disabilities; (*b*) to advise on areas of needed research; (*c*) to provide consultation as to the most appropriate research methods for particular studies; and (*d*) to summarize, review critically, and publish the results of research and demonstration projects of all types.

65. Because the prevention and treatment of chronic illness involve many complex and interrelated factors, teams of workers representative of all the sciences involved must collaborate in studies of health needs and the results of health services.

66. Physicians in individual practice, in comprehensive prepayment medical-care plans, and in group or industrial practice can augment our knowledge of the health status of individuals and families, changes in their health status, and many factors related thereto. Physicians can do this only if they maintain records and analyze and publish their data.

67. Financial support is badly needed for more effective research in the care of long-term patients. It should come from a variety of sources. Means must be found to stimulate additional interest on the part of Federal, State, and local governments; philanthropic foundations; industrial organizations; civic groups; and educational institutions in supporting these investigations. Also, voluntary health agencies now concerned with individual diseases or impairments—tuberculosis, poliomyelitis, blindness, orthopedic handicaps, for example—should conduct or finance demonstration projects and research

to reveal not only their special interests but also the common denominators in various forms of prolonged disability.

68. Lest this outline of needed research suggest that all types of investigation should be carried on at once, everywhere, before we will be on safe ground in establishing and improving programs for the long-term patient, the Commission wishes to express these additional convictions: Most of our knowledge of how to do a more effective job comes from careful and continuing analysis of what we are doing now and why. Each organization in each community, by systematic inquiry into some phases of its operations, can add to the reservoir of available knowledge from which other organizations and communities may draw.

Other investigations, more comprehensive in scope, may be needed to furnish the information required for success in curbing long-term disability. Others, no less important and valuable, can be short, one-time studies focused on one or another phase of the problem of the chronically ill. All types are needed.

Financing

69. Two related and often overwhelming financial problems confront the long-term patient: (*a*) Maintenance of income; (*b*) payment of the medical and related expenses resulting from the illness. A realistic solution to the first of these problems will ameliorate—but cannot be expected to resolve—the second. Both problems demand action.

(*a*) *Maintenance of income.*—A variety of devices has been developed through which income is maintained, in whole or in part, for some long-term patients. They include: Voluntary insurance plans, workmen's compensation, nonoccupational disability insurance, old-age and survivors insurance, and public assistance. These methods should be continued and their use further developed with particular reference to the long-term patient.

(*b*) *Payment of medical and related expenses resulting from prolonged illness.*—Medical care of the long-term patient currently is financed in a variety of ways: through direct personal financing, voluntary health insurance, philanthropic agencies, workmen's compensation, nonoccupational disability insurance, industrial medical-care programs, and tax funds. These methods should be expanded and new approaches explored. Until the time when the needs of all long-term patients are adequately met under plans or programs such as those listed here, there is no alternative to the basic proposition that society as a whole through taxation must meet the deficit and fill the gap. Funds for this purpose should be provided by local, State, and Federal taxation. The administration should be kept as close to the persons being served as is compatible with efficiency and economy. The grant-in-aid principle is applicable at both the Federal and State levels.

70. It is clear that more and better care could be had with present funds if they were used to best advantage. It is equally clear that more money is needed for care of the long-term patient and must be obtained. Those who supply money must recognize the gaps, overlaps, and imbalance that now characterize the financing of much long-term care. Those who administer funds must be alert to improve

ways of using money both within their own organizations and jointly with other agencies in coordinated activities.

71. For persons able to pay the basic premiums either directly or through employer contributions or otherwise, the extension of voluntary health insurance is the primary method for financing better care of long-term illness. The full potential of voluntary health insurance as an instrument for financing long-term care cannot be realized until private insurance and nonprofit voluntary prepayment plans—

(*a*) Expand the number and coverage of eligible beneficiaries.

(*b*) Extend the kinds and amounts of benefits to make possible the most effective and most economic care and to meet substantially the actual cost of long-term care.

72.[7] Old-age and survivors insurance should be extended to include maintenance for persons whose loss of income is due to long-term illness or disability. This extension should be designed to stimulate maximum rehabilitation and provide economic incentives to return to work. It should incorporate safeguards which would—

(*a*) Make the individual responsible for initiating an application for disability.

(*b*) Require medical evidence of long-term disability.

(*c*) Stipulate a reasonable waiting period immediately preceding application.

(*d*) Insure periodic medical reevaluation when necessary.

(*e*) Withhold benefits from individuals who refuse rehabilitation procedures considered safe and reasonable under modern medical practice.

(*f*) Utilize the vocation rehabilitation machinery in the States.

(*g*) Make clear that to the disabled the door to rehabilitation is always open; and provide economic incentives for accepting rehabilitation and trying to rejoin the labor force.

(*h*) Specify other safeguards comparable to those provided in the "disability freeze" program, including the provisions relating to qualifying periods of covered employment. Benefits should not be paid for periods of disability prior to inauguration of such a program.

(*i*) Provide penalties at law for abuse or fraud.

(*j*) Permit appeal.

73. Industrial health plans should be expanded to meet more adequately the needs of long-term illness. This expansion should embrace measures to broaden the base of protection against the costs of catastrophic illness.

74. Workmen's compensation systems should be modernized to broaden eligibility requirements where they are inadequate; to extend protection to agricultural workers and others not now covered; where necessary to extend weekly benefit payments and/or prolong maximum periods during which benefits are payable; to entrench firmly the concept and practice of rehabilitation; and wherever provision is made for cost of service to relate realistically benefits to costs.

75. Union health plans are increasingly an important factor in the care of the long-term patient. Employee groups are urged to continue the development of health plans which should provide for comprehensive medical service including rehabilitation. This applies to those

[7] See committee note on p. 91

programs keyed to insurance plans; those operating through service programs; and those which combine the two.

76. The primary function of philanthropy in financing the costs of long-term care is and should continue to be that of strategic investment of venture capital. For example, philanthropy should play an important role in financing the coordination of community facilities and lead the way in the provision of more adequate care through research, demonstration, and experimentation.

77. Public financing of medical care for long-term indigent and medically indigent patients is inadequate in most communities, whether for long- or short-term general hospital care, mental and tuberculosis hospital care, nursing home care, rehabilitation services, or care at home.

More adequate financing for medical services is one of the most urgently needed improvements in the public assistance programs now servicing 5,700,000 needy persons, at least 800,000 of whom are probably long-term patients. The grant-in-aid principle—State and Federal—should be used in financing medical care for this group.

Public provisions for financing should be such that funds are available for the kind of care best suited to each patient's need.

78. Increased amounts of public and private funds must be devoted to measures to coordinate the services needed by long-term patients.

79. Private and public expenditures for research should be expanded.

80. A vigorous program of public education should be launched to stimulate the achievement of the recommendations for financing outlined herewith.

(Committee Note.—Recommendation No. 72 was changed in the final report of the Commission, Chronic Illness in the United States, vol. II, Care of the Long-Term Patient (Cambridge, Mass., 1956), pp. 417–443, as follows:

Further studies should be undertaken to determine whether OASI should be extended to include maintenance for persons whose loss of income is due to long-term illness or disability or whether these needs should be met in other ways.)

A Minority Report on Extension of Old-Age and Survivors Insurance To Provide Disability Benefits

Recommendations concerning income maintenance for persons whose loss of income is due to long-term illness or disability cannot be considered comprehensive without mention of extension of the Nation's social insurance system to provide protection against this loss. It is to be regretted that the Commission on Chronic Illness, having previously affirmed and reaffirmed its approval of extension of old-age and survivors insurance to provide disability benefits, has now withdrawn its support of this important proposal.

Losses of income and costs due to sickness and disability have always been, except during periods of widespread unemployment, the greatest single cause of poverty and dependency in the United States. Efforts have been made to meet these problems through public assistance rather than social insurance. As the Advisory Council on Social Security stated in its 1948 report to the Senate Committee on Finance:

> Public assistance payments from general tax funds to persons who are found to be in need have serious limitations as a way of maintaining family income. Our goal is, so far as possible, to prevent dependency through social insurance and thus greatly reduce the need for assistance * * *.
>
> The Council believes that the permanently and totally disabled worker—as well as the aged worker or the dependent survivors of a deceased worker—should not be required to reduce himself to virtual destitution before he can become eligible for benefits. Certainly there is as great a need to protect the resources, the self-reliance, dignity, and self-respect of disabled workers as of any other group. The protection of the material and spiritual resources of the disabled worker is an important part of preserving his will to work and plays a positive role in his rehabilitation.

Proponents of a Federal system of disability benefits have not made their proposals hastily. Studies have been made by various sources on the effect of this extension of the social insurance program. The above-mentioned Advisory Council on Social Security made extensive studies. The Federal Security Agency, predecessor of the Department of Health, Education, and Welfare, studied this problem over a period of years. The "disability freeze" program, now administered by the Bureau of Old-Age and Survivors Insurance, provides additional pertinent information. Parenthetically, it may be remarked that this program also demonstrates the feasibility of making an objective medical determination of extended disability.

Facts are available and are being submitted in the current (1956) Senate committee hearings. It can only be assumed, therefore, that requests for additional studies are actually directed toward a delaying action.

The signers of this minority report regret the necessity for disagreeing with the majority of the commission. We believe, however, that the following recommendation concerning disability is a vital one, that the program described could be effectively administered and soundly financed in this country, and that we have a responsibility for meeting the maintenance needs of disabled workers through a contributory system rather than through public assistance. We recommend, therefore, that:

Old-age and survivors insurance should be extended to include benefits for persons whose loss of income is due to long-term illness or disability. This extension should be designed to stimulate maximum rehabilitation and provide economic incentives to return to work. It should incorporate safeguards which would—

(*a*) Make the individual responsible for initiating an application for disability.

(*b*) Establish strict eligibility requirements to test both the recency and duration of the individual's attachment to the labor force.

(*c*) Require medical evidence of long-term disability.

(*d*) Stipulate a reasonable waiting period after onset of disability and immediately preceding payment of benefits.

(*e*) Insure periodic medical reevaluation when necessary.

(*f*) Utilize the vocational rehabilitation machinery in the States.

(*g*) Make clear that to the disabled the door to rehabilitation is always open; and provide economic incentives for accepting rehabilitation and trying to rejoin the labor force.

(*h*) Specify other safeguards comparable to those provided in the "disability freeze" program, including the provisions relating to qualifying periods of covered employment. Benefits should not be paid for periods of disability prior to inauguration of such a program.

(*i*) Provide penalties at law for abuse or fraud.

(*j*) Permit appeal.

Sarah Gibson Blanding, Lester Breslow, member of commission, Mrs. W. Donald Brown, J. D. Colman, Joseph W. Fichter, E. L. Harmon, M. D., Karl P. Meister, Thomas Parran, M. D., Ellen C. Potter, M. D., Ollie A. Randall, Edward S. Rogers, M. D., Ernest L. Stebbins, M. D., T. J. S. Waxter.

MARCH 15, 1956.

The full membership of the commission follows:

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Edwin S. Hamilton, M. D., vice chairman; member, board of trustees, American Medical Association
J. D. Colman, secretary; vice president, Johns Hopkins University and Hospital
Theodore G. Klumpp, M. D., treasurer; president, Winthrop Laboratories, Inc.

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13. STATE AND FEDERAL HELP IN PROGRAMS FOR OLDER CITIZENS

By F. W. Pickworth, director of the division of hospital services of the Iowa State Department of Health

An address delivered at the Third Annual Conference of the Institute of Gerontology at Iowa City, Iowa, October 11–12, 1954. Mr. Pickworth is the director of the division of hospital services of the Iowa State Department of Health

As a preface to this discussion, I must remind you that the mere fact of a person's aging does not make him a problem. Many people 65, 75, or even 85 years of age are leading active, normal and productive lives. The problem lies with the aged citizen who is ill or an invalid because of a chronic disease, mental illness, congenital defect or injury. The program of care for this problem group should primarily be one of medical care and skilled nursing attention, rather than merely of housing.

It should also be pointed out that although the aging citizens constitute a large portion of the victims of chronic illness, the terms "aged" and "chronically ill" are not synonymous. It is felt, nevertheless, that the program of care outlined for the chronically ill is applicable in large measure to the care of the aging citizen. Based upon that premise, this discussion will attempt to outline the activities of governmental agencies in providing better patient care for the chronically ill.

All governmental activity is directed at the provision of better patient care. This goal is being accomplished through three major activities:

1. Development of diagnostic and treatment methods through extensive medical research at the National Institute of Health, Bethesda, Md., and at medical centers throughout the United States.
2. State hospital and nursing home licensing programs.
3. Assistance and guidance to communities in constructing adequate health facilities under the Hill-Burton Act.

On the first activity, that of developing better diagnostic and treatment methods through extensive medical research, there is sufficient material for an entire discussion period. It is sufficient to say that the present program of medical research and development is finding better diagnostic procedures and new medical treatment for many chronic diseases which, but a few short years ago were considered completely incurable. It is expected that, as the program continues, new medical diagnostic procedures and treatments will be found for many of the chronic ills that we consider incurable today. It is an excellent example of what can be done when unlimited funds and unlimited medical talents are turned loose on our present medical mysteries.

The second activity, that of licensing hospitals and nursing homes, is strictly a State government activity. The purpose of the licensing program is to enforce minimum standards of patient care in our

medical care institutions. Annually, the department of health must inspect and license approximately 175 hospitals and 600 nursing homes. Unfortunately, because of restrictions on its budget and personnel, the licensing agency cannot police the many institutions 24 hours a day every day for the year. Therefore, the program must be primarily educational, rather than closely supervisory. Every effort is made to advise the operators of the institutions on the proper medical care techniques and to instill in them the desire to provide proper patient care. Of course, any educational program is slow and tedious, and many times it moves much more slowly than the general public would like it to do. Some people criticize the department for not closing an institution the minute some shortcoming in operation comes to light, and, on the other hand, many others criticize the department for acting too hastily in enforcing minimum standards. The department, thus, is in the unenviable position of being damned if it does and damned if it doesn't, and this situation can be rectified only through full support of the licensing program and the exercise of a considerable degree of forbearance both by average citizens and by their elected representatives.

The third activity, that of assisting and guiding the local communities in the construction of adequate medical facilities, is a Federal program administered through State agencies. The Hospital Survey and Construction Act, Public Law 725, better known as the Hill-Burton program, was enacted in 1946 to provide financial assistance to local communities for the construction of five categories of medical facilities. These categories are: (1) acute short-term general hospitals, (2) mental hospitals, (3) chronic disease hospitals, (4) tuberculosis hospitals, and (5) public health centers. In the past 7 years, Iowa has received approximately $9,500,000, which has been used to assist in the construction of 50 hospital projects with a total construction cost of approximately $30 million. All of the grants excepting three were for building short-term general hospitals. The three exceptions were all mental hospital units in connection with general hospitals. Because only limited funds were available under the Hill-Burton grants-in-aid program, only about one-half of the total volume of construction in hospitals in the State of Iowa during the last 7 years was done with Federal assistance. It is felt, however, that the Hill-Burton program stimulated the construction of acute short-term general hospitals both with and without that help.

The construction program in Iowa was typical of what was carried out throughout the United States. The Hill-Burton assistance, as a whole, has resulted primarily in the construction of acute short-term general hospitals. Although most State plans establish a high priority for mental hospitals, chronic disease hospitals, public health centers, etc., most communities' interests were in the development of acute short-term general hospitals, and since the construction grants were not definitely earmarked to a specific category, the program did not result in the construction of the specialized facilities. In an effort to rectify this situation, the last session of Congress passed the Medical Facilities Survey and Construction Act, Public Law 482, establishing grants for four types of facilities. These types are (1) chronic disease hospitals, (2) diagnostic and/or diagnostic and treatment clinics, (3) rehabilitation centers, and (4) nursing homes. The categorical grants for the first three types can be transferred for use in building

another type of facility only if no approvable applications are received after a reasonable period of time has been granted possible applicants in the State. But rehabilitation facilities must be built from rehabilitation center grants, and no funds can be transferred into or out of that category.

NEW CATEGORIES FOR FEDERAL AID

Since experience has indicated that the public will buy the medical facilities needed to meet its medical requirements, provided that it becomes fully aware of what the facility is to do, it seems advisable at this point that I define the categories provided by the new Medical Facilities Survey and Construction Act:

1. A chronic illness hospital is a hospital the primary purpose of which is medical treatment of chronic illness, including the degenerative diseases, and which furnishes hospital treatment and care administered by or under the direction of persons licensed to practice medicine or surgery in the State. The term includes such convalescent institutions as meet the foregoing qualifications, but excludes tuberculosis and mental hospitals, nursing homes, and any institution the primary purpose of which is domiciliary care. Federal grants-in-aid may be used to build up to two beds per thousand population.

2. Diagnostic and/or diagnostic and treatment clinics are facilities providing community service for the diagnosis or treatment or both of ambulatory patients which are operated in connection with a hospital or in which patient care is under the professional supervision of persons licensed to practice medicine or surgery in the State. This includes outpatient clinics or departments of public or nonprofit hospitals and may provide patient beds essential to certain diagnostic or treatment techniques, provided that the primary purpose of the facilities remains the provision of service for ambulatory patients. Federal funds may be used to provide up to 1 clinic per 10,000 population.

3. Rehabilitation centers are facilities which are operated for the primary purpose of assisting in the rehabilitation of disabled persons through an integrated program of medical, psychological, social, and vocational evaluation and service, under competent professional supervision. The major portion of each of these areas of evaluation and service must be furnished within the facility, and the facility must be operated either in connection with a hospital or as a facility in which all medical and related health services are prescribed by or are under the general direction of persons licensed to practice medicine or surgery in the State. Federal funds may be used to build up to 1 center per 200,000 population.

4. Nursing homes are facilities which are operated in connection with a hospital or in which care and medical services are prescribed by or performed under the general direction of persons licensed to practice medicine and surgery within the State, for the accommodation of persons who are not acutely ill and not in need of hospital care, but who do require skilled nursing care and related medical services. The term "nursing home" shall be restricted to those facilities providing community service and the primary purpose of which is to provide skilled nursing care or related medical service for a period of not less than 24 hours per day to individuals admitted because of illness, disease, or physical or mental infirmity. The term

shall exclude those institutions the primary purpose of which is to provide domiciliary care. Federal funds may be used to build not to exceed three beds per thousand population.

IOWA'S NEEDS AND THOSE OF OTHER STATES

Like the basic Hill-Burton Act, the recent amendment provides that the State must first conduct a survey and take an inventory of existing facilities in the four categories to serve as a basis for the development of a State plan, before construction grants can be allocated to any specific project. To assist in this survey and plan development, the law provides for an appropriation of $25,000 to Iowa, which must be matched with an equal sum from State funds. Although, on the surface, this may seem a huge amount of money, it actually will permit only a very cursory type of State survey. The information obtained as a result of the State survey may be extremely useful to local communities, but should not be used as a substitute for a local survey. A portion of this survey has been finished by the State agency, and plans for its completion are presently being formulated. During the months of May and June 1954, a survey of nursing home facilities was accomplished, and the findings have since been compiled with similar information from 35 other States.

A comparison of the information received from the 35 States reveals some definite relationships. The nursing home institutions were roughly divided into four types: (1) skilled nursing homes, providing skilled nursing care as their primary and predominant function; (2) care homes, with skilled nurses providing skilled nursing care, but only as an adjunct to the primary domiciliary or personal service function of the institutions; (3) care homes without skilled nurses, providing personal service with no skilled nursing care; and (4) sheltered homes, providing room and board with minimum supportive services. The tabulation that follows shows how Iowa compares with a projected national average.

	Iowa			National		
	Number of homes	Number of beds	Beds per 1,000	Number of homes	Number of beds	Beds per 1,000
Skilled nursing homes	278	6,303	2.4	7,000	450,000	1.1
Care homes with skilled nursing	24	454	.2	2,000	80,000	.5
Care homes without skilled nursing	771	3,471	1.3	7,000	110,000	.7
Sheltered homes	631	6,170	2.4	9,000	80,000	.5

Comparing the information regarding numbers of homes and numbers of patients with known information regarding certain contributing factors, one finds that the numbers of chronic disease hospital beds available in the State definitely reduces the demand upon nursing-home beds. Further, the number of nursing-home beds required in a State is directly affected by such factors as per capita income, agedness of population, proportion of the population living in urban areas, and relative availability of physicians and nurses in the State. In Iowa, the contributing factors are all favorable in establishing a demand for a large number of nursing-home beds.

As pointed out earlier, it is absolutely essential that any community proposing a program of care for the chronically ill should survey local conditions that would affect it. The survey should determine the dimensions of the problem and the effect of contributing factors, and should plan for a coordination of facilities and services. The State agency will render such assistance to the communities as its finances and personnel will permit.

SUMMARY

In conclusion, it should be pointed out that there is no single all-purpose institution that can meet all of the needs of the aging citizen. Conquering the major health problems of today will require a network of general hospitals, special hospitals, clinics for ambulatory patients, nursing and convalescent homes, rehabilitation centers, and home-care programs, all working together. We feel that the problem must be attacked by means of a proper sequence of facilities, providing first for medical care, so that a definite program of medical and vocational rehabilitation can be instituted to reduce the residual numbers of people who must be provided terminal domiciliary facilities. Any community planning for the care of the aging citizen should consider four major factors in their proper order: (1) medical and vocational rehabilitation wherever possible, (2) employment or reemployment, (3) living arrangements and recreation, (4) economics. It will be noted that we have placed the matter of the economics of the entire program last in order of importance. It is felt that the proper attention to the first two items will definitely affect the total economic picture and, further, that in this country, in its present economy, we are economically able to do right by our aged citizen. If this country cannot do the job, then the worldwide problem is completely unconquerable.

14. ANALYSIS OF THE OPERATION OF THE HILL-BURTON HOSPITAL SURVEY AND CONSTRUCTION PROGRAM IN RELATION TO THE NEEDS OF OLDER PERSONS

John W. Cronin, Chief, Division of Hospital and Medical Facilities, Public Health Service, United States Department of Health, Education, and Welfare, October 5, 1956

1. INTRODUCTION

The Hospital Survey and Construction Act, Public Law 725 (79th Cong.) makes no specific provision for facilities for the care of older persons. Each of the eight categories of facilities authorized by the act does, however, make a direct contribution to the care of our aging population. The facilities authorized by the act are:

1. General hospitals
2. Mental disease hospitals
3. Tuberculosis hospitals
4. Chronic disease hospitals
5. Health centers
6. Nursing homes
7. Diagnostic and treatment centers
8. Rehabilitation centers

The advent of Federal assistance under the Hill-Burton program, combined with private construction after World War II to establish an unprecedented peak in hospital construction volume. The increased construction has succeeded only in keeping up with increasing need, occasioned by a growing population and the obsolescence of preexisting facilities.

The annual summary of beds supplied by the State hospital planning agencies shows that today there are about 265,000 more hospital beds in the country than in 1948. Of this net gain in hospital beds, the Hill-Burton program is providing 135,500 additional beds. The need for additional beds in all categories is still much in excess of one-half million. The Hill-Burton program, however, has stimulated hospital construction by tending to provide a higher proportion of Federal aid in lower income areas. This has produced a much better distribution of hospitals, particularly in the rural areas.

Of the 135,500 beds approved to June 30, 1956, for Federal assistance, the great majority, 109,000, have been in the general hospital category. This is because the need in this area has been the most pressing and particularly because the medical economic machinery of the country is best geared to this type of hospital operation.

As a result of these forces, the general hospital bed requirements of the Nation have risen to about 75 percent of the total need. This average, however, conceals wide variations among the several States. At the same time, facilities contributing more directly to the care of older people, i. e., mental and chronic, have fallen far behind the rapidly

increasing need. The Nation now has only about 13.5 percent of its needed chronic disease beds and 56 percent of its needed mental beds. It should be pointed out that this lag is not due to a proportionate lack of funds available under Hill-Burton, but rather to competition by the general hospitals and the generally unfavorable economic circumstances under which these facilities must be built and operated.

Federal funds under the Hill-Burton program have been approved, to June 30, 1956, for assisting in construction of 11,400 mental hospital beds and 5,900 chronic hospital beds. This is about one-sixth of the net gain in that period for acceptable beds in mental hospitals, and about one-half of the net gain for chronic hospitals.

Health centers make a valuable contribution to the health of older people by promoting better personal and environmental health and through public health education. Through Hill-Burton aid and otherwise, there are now about 800 adequate health centers in the country. Over one-half of these have been provided by Hill-Burton assistance. This is only about one-third the number needed to bring these services to all areas of the country.

2. PROGRAM ACCOMPLISHMENTS FOR HOSPITALS AND HEALTH CENTERS

As of June 30, 1956, 3,047 projects have been approved for Federal assistance. Of these projects 2,050, providing 95,149 beds, have been completed and are in operation; 806 projects which will add 32,847 beds are under construction. The remaining 191 projects are in the preconstruction stage; these will provide an additional 7,502 beds. A grand total of 135,498 hospital beds and 748 health units for outpatient care will be available as a result of these projects.

The majority of all approved applications are for general hospital projects. As of June 30, 1956, 68 percent were for general hospitals adding 108,955 beds, 3 percent for mental hospitals adding 11,403 beds, 2 percent for tuberculosis hospitals adding 7,010 beds, 3 percent for chronic disease facilities adding 5,871 beds, 1 percent for nursing homes adding 2,259 beds, 18 percent for public health centers, and 5 percent for other related hospital facilities.

3. FACILITIES TO CARE FOR THE CHRONICALLY ILL

The chronic and disabling diseases are today's major health problem. Chronic illness causes substantially more days of disability than acute illness. It is estimated that about 5.3 million people in the United States today are suffering from long-term illnesses.

The need for more beds for chronic illness is intensified by the aging character of our population. Within the last 50 years the proportion of the population over 65 has doubled, and this ratio is continuing to rise. The rate of disability among people over age 65 is 2¼ times as high as the disability rate for the whole population.

Proper care of chronic illness often requires a variety of facilities and professional skills. These may constitute a heavy financial drain on family and community resources.

The great shortage of hospital beds which have been planned specifically for chronic care is resulting in wide use, instead, of general hospital facilities. This uses beds which are needed for acute illness

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and services which are more expensive than would usually be required for care of long-term illness.

The rate of hospital admissions among the aged to general hospitals is about the same as that for the population as a whole; but the average length of stay per hospitalized aged patient is considerably higher than that of the population as a whole; resulting in a utilization rate, measured in terms of hospital days per thousand persons per year, of over 2,000 days per 1,000 persons over age 65, as compared with over 1,200 days per 1,000 persons for the general population of all ages. The aged receive approximately 65 percent more days of hospital care per 1,000 persons than do the general population.

4. AMENDMENTS TO TITLE VI OF THE PUBLIC HEALTH SERVICE ACT

In 1954 the hospital survey and construction program was broadened to stimulate the construction of facilities for the care of the aged ill, ambulatory patients, and for providing rehabilitation services to the disabled.

These amendments authorized grants to the States for surveying need and developing State construction programs for four classes of projects; hospitals for the aged ill and impaired, nursing homes, diagnostic centers or diagnostic and treatment centers, and rehabilitation facilities; $2 million was appropriated to assist the States in the survey and planning phase. This survey money is matched, dollar for dollar, by the States.

The amendments also added to title VI of the Public Health Service Act authority for appropriations to pay part of the cost of constructing these facilities. Amounts authorized annually through the 1959 fiscal year are (*a*) $20 million for diagnostic centers or diagnostic and treatment centers; (*b*) $20 million for chronic disease hospitals; (*c*) $10 million for rehabilitation facilities; and (*d*) $10 million for nursing homes. The minimum State allotment is $100,000 for diagnotic or diagnostic and treatment centers, $100,000 for chronic disease facilities, $50,000 for rehabilitation facilities, and $50,000 for nursing homes. For this phase of the program, the Congress has appropriated $21 million for each of the 1955, 1956, and 1957 fiscal years.

The 1954 amendments have other important implications for caring for our aged. The amendments earmarked funds for these categories. This has stimulated matching funds for other health facilities besides hospitals, so that a more rounded program of comprehensive health services, may be provided, especially for the aged.

In addition, the amendments established standards of quality for the categories. Aged persons in nursing homes require technical nursing skills beyond those which an untrained person can adequately administer. Increasingly there has been recognition that the nursing home needs to provide more than board and room. Legislation regulating various aspects of nursing home care has been enacted in most States which recognizes the medical component of nursing home care. The amendments, therefore, supply Federal aid for those nursing homes which provide "skilled nursing care." "Skilled nursing care" is defined as "nursing services and procedures employed in caring for the sick which require technical skill beyond that which an untrained person possesses."

In order to receive Federal aid for the construction of diagnostic and treatment centers, the services to be provided must be described. The opportunity, therefore, arises for providing diagnostic and treatment services of a quality and quantity heretofore lacking.

Federal aid for the construction of rehabilitation facilities is available only for comprehensive rehabilitation facilities. These provide for all rehabilitation services necessary to the restoration of a disabled person, by including in the comprehensive facilities, medical, psychological, social, and vocational services.

5. SKILLED NURSING HOMES

Nursing homes under medical direction now constitute a significant contribution to our facilities for medical care of the aged. Only about 1 percent of the patients in nursing homes are less than 45 years of age. Prolonged illness, especially among elderly people, does not always require care in general or chronic disease hospitals. The cost is prohibitive, and some services are not necessary. The cost of care in high quality nursing homes is less than one-half that of care in general hospitals.

Nursing homes have developed rapidly since 1930. According to State inventories, homes with skilled nursing care now have a capacity or about 0.7 bed per 1,000 persons, nationally. Thus constitutes 29 percent of the estimated need for skilled nursing homes. There are great differences in the character of service and the regional distribution of persent facilities.

A start has now been made in additional construction with Federal assistance under the 1954 amendments to the Public Health Service Act. As of June 30, 1956, 42 nursing home projects have been approved, providing 2,259 beds at an estimated total cost of about $22 million, including a Federal contribution of $6 million.

6. DIAGNOSTIC OR TREATMENT FACILITIES

Centers for the diagnosis and treatment of ambulatory patients emphasize prevention and early diagnosis of illness. These permit more effective treatment and early recovery, with great savings in cost and in protection of individual health.

A diagnostic and treatment center is a facility in which physicians and technicians operate as a team, to make full use of advances in modern medical science and of the equipment available for accurate diagnosis and effective treatment. Most centers with such specialized services are now largely concentrated in metropolitan areas. The State hospital and medical facilities survey and construction plans indicate that there are about 3,150 diagnostic or treatment centers in the country providing adequate services. These constitute about 64 percent of the program planned for the country.

Outpatient departments are needed on a much wider scale in major hospitals now established. In addition, independent diagnostic or treatment centers could be provided in smaller communities to serve surrounding rural areas.

On June 30, 1956, 77 diagnostic centers had been approved for Federal assistance, at an estimated total cost of nearly $32 million, with a Federal share amounting to $8.5 million.

7. REHABILITATION FACILITIES

Rehabilitation is the process of restoring a physically handicapped person to the point where he can either take care of himself at home or become productively employed. This process is important to the national health, in terms of both personal human values and economic gains to society.

Restoration of the patient to self-care relieves a heavy private burden on families and diminishes the patient load in hospitals and nursing homes. Return to productive employment, called vocational rehabilitation, decreases the burden of public assistance and contributes to public revenues through taxes paid on income.

Throughout the country, only 28 facilities now offer comprehensive rehabilitation services. Partial service is available on a very limited scale in 680 other facilities. The 28 acceptable rehabilitation facilities now in use constitute only an eighth of the program planned to provide comprehensive rehabilitation services to the disabled.

By June 30, 1956, 43 projects for comprehensive rehabilitation services had been approved for Federal assistance, at a total estimated cost of $35 million, of which the Federal share is estimated at $5.8 million.

SECTION C. MENTAL HEALTH

15. PUBLIC POLICY AND MENTAL PROBLEMS OF THE AGING [1]

By Dr. Maurice E. Linden, director, division of mental health, Department of Public Health, city of Philadelphia

There are three current realities that compel planners in the area of psychiatric gerontology to reevaluate their thinking and perhaps to revise projected programs designed to meet the mental health needs of an aging population:

1. Mental health populations are steadily increasing in the older age category.
2. The mere provision of an ever-increasing number of hospital beds is not the answer to the problem of mental and emotional indispositions of the aging process.
3. The responsibility resides in each community relative to providing special services for the welfare of its older citizens.

For some years now we in the field of public mental health have been making a concerted effort to remove the social stigma that tends to accrue to the diagnosis of mental illness, and to elevate public regard for the services and functions of mental hospitals. While we have not yet succeeded completely in removing the disagreeable connotations associated with mental disorders, it seems to me that we have, to some extent, publicly oversold the mental hospital. Not only has the community been made conscious of the therapeutic value of well-implemented mental hospital programs, but also, simultaneously, the standards for diagnosis, treatment, and care in such institutions have been raised to a high level of competence and effectiveness. Under these circumstances, we are not surprised that the community thinks in terms of mental institutionalization in every instance in which one of its members shows evidence of an emotional disorder or aberration, whether this be on the basis of psychological factors developed in the course of the individual's life, or whether they be borderline mental health problems growing out of the biological process of attaining to advanced maturity.

I am convinced that many of our mental hospitals offer excellent treatment and care programs for emotionally disturbed aged people. I have personally seen and participated in therapeutic programs which succeed astonishingly in reversing undesirable psychological processes in the aged and in creating community effectives once again out of individuals who were thought to be wholly lost to a so-called senile process.

OUTSTANDING EXAMPLES OF THERAPY

There are some reports from the medical literature that demonstrate the value of a variety of therapeutic programs with the aged. The following are a few of the outstanding examples of such programs.

[1] From New York State Joint Legislative Committee on Problems of the Aging, New Channels for the Golden Years, Legislative Document (1956), No. 33, Albany, N. Y., pp. 77–80.

One group of investigators under Dr. Frederick Zeman and Alvin Goldfarb at the Home for the Aged and Infirm Hebrews of New York City have repeatedly shown the effectiveness of programs based upon individual psychotherapy with the aged. One of the early studies with chlorpromazine by Dr. N. William Winkleman of Philadelphia demonstrated a high proportion of benefited elderly, agitated, and disturbed psychotic patients when placed on this medication for appropriate periods of time.

Results, not unlike those obtained in Philadelphia, have been reported from the geriatric unit in Queens Hospital, Croydon, England. Good results were reported from Florence, Italy, by Drs. Mars and Morpurgo in the use of chlorpromazine with aged patients who are suffering from psychosis of the delirious type, depressions associated with aging, subacute alcoholism, and the epileptic group of symptoms. The British Medical Journal of April 1955 has an article by Dr. Seager, the registrar of the Bristol Mental Hospitals, in which is reported a nearly 72 percent effectiveness of chlorpromazine in its capacity for improving the general behavior of a group of elderly psychotic women. In the foregoing studies, it was generally found that the hospital adjustment of the patient was improved, but the suitability for discharge from the hospital was not greatly enhanced. At the Norristown State Hospital in Pennsylvania, I had the privilege over a period of years to study the effects of a variety of medications such as oral metrazol (R) vitamin B^{12}, nicotinic acid, and other medications other than chlorpromazine and the reserpine groups. An important element in treatment at Norristown was the use of group psychotherapy as an adjunct to all medication regimens. Approximately 60 percent of the patients were considerably benefited in these studies, and about 35 percent of the patients were rendered suitable for release to the community, while 10 percent of them became partially or wholly self-supporting.

Many institutions and clinical facilities throughout our country and others are engaged in therapeutic study projects designed to further evaluate the effectiveness of the tranquilizing and stimulating groups of drugs. Unofficial reports show considerable promise, and in the not too distant future we shall have further documentary evidence of the value of pharmaceutical substances with and without the associated psychotherapeutic programs in affecting the mental health problems of older people.

A study now in progress in Delaware may show the merit of chlorpromazine in the treatment of disturbed people of all ages in their own homes and in foster care situations. Three types of patients are being observed in this research: (1) patients on a followup routine after discharge from an institution, (2) patients who have been discharged prematurely from hospitalization, and (3) a group of people certified for admission to a mental hospital, but who have never been admitted, and who may be enabled to remain in the community with the aid of chlorpromazine therapy. Similar work is now in progress under a research group here in New York State. It is still too early to say with any degree of certainty what all of the studies now in progress will show, but if my own experience in the private practice of psychiatry and that of many of my colleagues, of whom I've made inquiries, are any indication, there is reason to expect that the tranquilizing or ataraxic agents will enable large numbers of emotionally

disturbed people of all age groups to be treated in their homes and other nonhospital places of residence. A public program has been in operation in Amsterdam, Netherlands, for 25 years in which it has been demonstrated that approximately 10 percent of patients recommended for institutionalization can be cared for very satisfactorily in the community through psychiatric and social work counseling services developed under Dr. A. Querido, professor of social medicine at the University of Amsterdam. Dr. Querido has been touring our country recently under the aegis of the Milbank Fund. I have conferred with him, and I'm convinced that similar programs can work here. Were the tranquilizing drugs added to the operation, in all likelihood the number benefited would be greatly increased. We have already taken the earliest steps toward the citywide application of such a program in Philadelphia.

The use of "wonder drugs," which at times admittedly seem miraculous, tends to accentuate therapeutic methods that employ almost exclusively impersonal and mechanical procedures such as the giving of a pill.

It must never be forgotten that some of the major factors that contribute to the development of emotional problems in our senior citizens are social rejection of the aged, the diminution in the circle of friendly associates, intense loneliness, reduction and loss of their feelings of self-esteem, and their own sense of self-rejection. The aged, like anyone else, need personalized care; they need human contact. One of the drawbacks of mental hospital care is the practically unavoidable tendency toward regimentation. People treated in large numbers develop a group dependency need.

Should they respond to care, they develop that most insidious of conditions known as hospital adjustment; a state of noncreative suspension in the meaningless limbo of purposeless quietude. Many hospital administrators say, "You can do a lot for them, you can improve them, and you can get them to the door, but they won't take the next step." It seems clear to me that the tide to the mental hospital must be stemmed. The Commonwealth of Massachusetts is enjoying considerable success in reducing its flood of State hospital admissions, and has apparently struck an equilibrium between its mental hospital facilities and community need. Since 1935, Maryland has been pointing the way toward community care of the mentally ill, over a third of whom are older citizens.

The institution, with its monstrous proportions and spacious wards, is obsolescent, especially with regard to the aged. The older citizen who has committed no social iniquity other than to have arrived haltingly into the province of mature wisdom and realization deserves more than consignment to the ignominy and pathetic obscurity of a medical grand central terminal, even if the latter be well ordered and well run. There is the need for smaller units for the care of the elderly mentally disturbed. The cottage community, adjacent to, or part of a psychiatric center, mental hospital or other, is one good answer. Older patients thus located enjoy the dual advantage of more individualized care and the availability of competent and well-trained professional therapists and consultants. The mental hospital will probably remain, for many years to come, the locus for the treatment and care of the most difficult psychiatric problems. It should not become the mere custodial center for the

prologue to life's terminus. But part of the trend must be reversed. A new trend needs popularization; the trend away from the mental hospital. To accomplish this, three social needs must be met:

1. The need for community education to remind people of the family's time-honored responsibility to care for its handicapped, as well as the pertinent aspects of mental hygiene.
2. The need for multiple, relatively small community based residential treatment centers for moderately disturbed aged.
3. The need for psychiatrically, clinically orientated day-care centers for older persons to serve as the community's focal point for preventive services.

There are signs, all over the country, that mental hospitals purely through the principle of survival are being forced to develop selective and restrictive intake policies. The community must take up the slack. Clearly, the cost burden for such public services will require the pooling of capital resources of both the State and the community. The mental health interests of the State and the communities must be merged. I am pleased to report that such a merger has taken place between the Commonwealth of Pennsylvania and the city of Philadelphia. Out of such cooperative and joint activities will come, not more mammoth mental hospitals, not county homes and poor farms, not more of those nondescript human disgraces sometimes euphemistically referred to as a home with some kind of nursing implied. Instead, there will come for the aging citizens sound, preventive mental health programs, decent housing, respectable villages built upon the principle of continued usefulness, real clinics where the aged are understood, not tolerated, and discreet and warm cottage communities where the milk of human kindness does not curdle on its way to the hapless and sick oldster.

In summary then, I believe, public policy should be such as to create a health and welfare atmosphere in which members of families are reinstilled with a sense of mutual responsibility, and in which the therapeutic units are truly therapeutic—in order hopefully and ultimately to do away with the necessity for public policy.

16. THE AGED IN STATE MENTAL HOSPITALS [1]

By Dorothy C. Tompkins, from The Senile Aged in the United States, Bureau of Public Administration, University of California, Berkeley, Calif.

There are thousands of aged persons in mental hospitals because there is no other place for them. They are called senile, unadjusted, elderly, or emotionally labile. They overburden the facilities for care of the mentally ill and their special treatment needs cannot be met in this kind of environment.

This problem of the senile aged is actually a small part of the larger problem of the aged today. While advances in medical science have been increasing the relative number of old people, society has been progressively reducing the social and economic functions of the aged.

During the last 10 or 12 years there have been numerous conferences, commissions, institutes, committees, research projects, etc., devoted to the various problems of the aging. On the problem of caring for the senile, many of the conferences and other groups recognized that there are thousands of such patients in mental hospitals who do not require psychiatric care, but rather a protected, custodial care which is not available to them anywhere else.

In some of the States, geriatric units have been added to mental hospitals and special facilities have been adapted to the care of the senile. One State has initiated a community placement or home care program. In many States, the consensus appears to be that the care of seniles (those persons who are not so disturbed as to need mental hospital care) is a local problem to be met through community facilities—infirmaries or nursing homes, boarding or foster homes home-care and day-care services.

* * * * * * *

The senile are aged persons who have marked loss of memory, are childish, mildly irritable, restless at night, careless in toilet habits, bedridden by infirmities of old age, and who become troublesome nursing problems because of personal habits.[1a] They are older persons who are "emotionally labile," frequently confused and forgetful, and often feeble and physically ill. These seniles may manifest mental changes of sufficient severity to warrant their treatment in mental hospitals. Many require bed care and most present dietary problems.[2]

No specific definition of the senile is commonly accepted, since the amount of disturbance is a matter of degree. Senility is a mental and not a physical state, although it is often accompanied by physical ailments as well as evidence of damage to the blood vessels of the brain.[3]

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[1] Part of the study, The Senile Aged Problem in the United States, by Dorothy C. Tompkins: Bureau of Public Administration, University of California (Berkeley), 1955 Legislative Problems: No. 1.

[1a] California. Governor's Conference on the Care and Treatment of Senile Patients, September 1950, Final Report, p. 6.

[2] Minnesota Welfare 10: 7, August 1954.

[3] Shanas, The Challenge of the Aged, State Government 24: 134, May 1951.

It is possible only to approximate the number of seniles because of the difficulties relating to the diagnosis and the labeling of individuals living in their own homes, homes of families or friends, or living in the different categories of institutions. There is also the difficulty due to changes in the physical condition of the individuals so that diagnoses of senility will be changed to diagnoses of other organic conditions or the reverse.[4]

The National Health Survey of 1935–36 estimated that 68 persons of every 100,000 were disabled by reason of senility,[5] which was the fifth of 12 leading causes of chronic disease or disability.

In 1950, the senile mentally ill constituted about 17 percent of the population living in California State hospitals.[6] Over a third of all patients cared for in California county hospitals were senile.[7] Over 12 percent of the patients in nursing care institutions for adults in Maryland in 1952 had a primary diagnosis of senility.[8]

In 1953, senility was the sixth major cause of disability of clients cared for by 50 homemaker service programs throughout the country.[9] It was the primary diagnosis in 4.8 percent of 525 cases served by the Instructive Visiting Nurse Association of Baltimore City.[10]

In 1925, 7 percent of the patients in Illinois State hospitals were either senile or arteriosclerotic. By 1953, this percentage has risen to 14.8 percent.[11] Over a third of first admissions to New York State mental hospitals during 1946 were senile.[12] In 1953, there were 70 percent more patients in New York State hospitals because of senility than there were 30 years before; the percentage of first admissions to State hospitals due to mental illnesses associated with senility have risen 42 percent.[13]

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A serious problem in many States is created by the increasing number of senile persons in the State mental hospitals who do not need psychiatric treatment and who could, under proper conditions, live in a more normal setting in their home communities.[14] It has been suggested that—

> the rate of admission of older persons to hospitals for mental disease is merely part of a universal sociologic phenomena by which sick persons are being cared for in hospitals rather than in their homes.[15]

Whether this be true or not, the hospitals at present available for chronic disease are filled with elderly patients.

> Whenever an aged patient cannot care for himself and he has no one to care for him, he eventually goes to the State hospital, although many of the aged presently admitted for care

[4] South Dakota. Legislative Research Council, The Care of the Senile * * * (1954), p. 10.
[5] National Conference on Care of the Long-Term Patient, Care of the Long-Term Patient (1954), p. 15.
[6] National Conference on Care of the Long-Term Patient, Study Group Reports, Committee 1 (1954).
[7] California. Governor's Conference on the Care and Treatment of Senile Patients, September 1950, Final Report, p. 5.
[8] National Conference on the Care of the Long-Term Patient, Care of the Long-Term Patient (1954), p. 68.
[9] Ibid., p. 40.
[10] Ibid., p. 45.
[11] Illinois. Department of Public Welfare, The Aged and Aging in Illinois, pt. 1, p. 14.
[12] New York State. Joint Legislative Committee on Problems of the Aging, Birthdays Don't Count (Legislative Document (1948) No. 61), p. 244.
[13] New York State. Joint Legislative Committee on Problems of the Aging, Enriching the Years (Legislative Document (1953), No. 32), p. 40.
[14] American Public Welfare Association, The Range of Public Welfare Services to Old People (1954), p. 7.
[15] Stearns, "Psychiatric Aspects of Senility," Maine Medical Association, Journal 38: 257, November 1947.

> in a mental hospital show nothing more important than memory impairment, confusion, and physical infirmity. It seems evident that many who come to the mental hospital, come primarily for sociologic reasons.[16]

In 1950, the Governor of Missouri estimated that at least 50 to 60 percent of the patients in the State hospitals are senile patients who need no medical attention but just custodial care.[17] Of 220 patients over the age of 60, admitted to California State mental hospitals during June 1950, more than one-third were nonpsychotic and "should have been cared for elsewhere than in a mental hospital." [18]

The problem of what to do about senile patients in State mental hospitals who should not be there was considered by the California Governor's Conference on the Care and Treatment of Senile Patients, held in September 1950.[19]

County facilities were overcrowded, especially those for the senile. Only 30 percent of county hospital beds were available for senile patients who constituted 36 percent of county hospital patients. With local resources inadequate, senile patients were committed to State mental hospitals. Although they did not belong in mental hospitals, many improved there because they received good food and care. More than 15 percent of the patients aged 60 or over who were admitted to State hospitals in the year ended June 30, 1949, had been discharged by June 30, 1950. On the other hand, many aged patients admitted to State hospitals die within a few days. These patients are not psychotic but are suffering from a terminal illness accompanied by mental symptoms.

Mental hospitals are not the proper facilities for the care of senile patients.[20] If circumstances permit, the aged person is usually happiest in his own home. If placement outside the home is necessary, the choice of a facility depends upon the patient's means and his condition. Allowing for the maximum degree of family responsibility, the conference concluded that government still must protect and care for the aged who are alone or whose families cannot care for them. Government must have facilities for these patients, and if the financial burden becomes too heavy for the local community, State resources should be used. Government is also responsible for protecting patients whose families can pay for care in boarding homes or private institutions by setting standards for housing and care.[21]

Licensed boarding homes for aged persons were proposed as a comfortable and protected living situation for senile patients with mild symptoms. Many patients are physically ill and need the facilities of a private or public general hospital. Another group of senile patients needs close supervision and the care which can be provided by a private nursing home, a private institution licensed for care of the mentally ill, or infirmary facilities attached to a county hospital.

Maximum expansion of private facilities would not meet the entire need since this maximum is limited and the cost of care in these facilities is high. Hence, the conference found an urgent need for

[16] Group for the Advancement of Psychiatry, The Problem of the Aged Patient in the Public Psychiatric Hospital (Rept. No. 14, 1950), p. 1.
[17] Governors' Conference, Proceedings, 1950, p. 143.
[18] California Governor's Conference on the Care and Treatment of Senile Patients, September 1950 Final Report. p. 4.
[19] Ibid. Fifteen pages. Sacramento, 1950.
[20] Ibid., p. 8.
[21] California. Governor's Conference on the Care and Treatment of Senile Patients, September 1950, Final Report, p. 8.

expansion of public facilities for institutional care of senile patients.[22] Elaborate medical institutions are not needed and cottage-type facilities attached to county hospitals would be less expensive and more homelike. Reduction to the minimum of State regulations for construction of such facilities would make it possible for small counties with limited funds to provide more adequately for their senile patients. General hospitals, public and private, should be encouraged to establish geriatric and infirmary units so that the senile could be given appropriate care and moved within the hospital when his condition required it.

CALIFORNIA

The California Governor's Conference on Problems of the Aging, held in October 1951,[23] reaffirmed the recommendations of the Governor's conferences on mental health in 1949 [24] and on care of senile patients in 1950, but noted with regret that most of the recommendations of these conferences has not been fully recognized in a functioning program. The early construction and operation of public facilities for the care of senile persons in or near their home communities, was urged. The cost of this program should be shared by the State and counties on an equitable basis, and the special problems of the smaller counties should be recognized in enabling legislation.

In 1951, and again in 1953, bills were introduced in the California Legislature providing for a State subsidy to be paid to counties to care for senile patients in suitable hospital-type units in their own communities. Both bills failed.

The California Department of Mental Hygiene in 1949 requested the courts to commit nonpsychotic senile patients to local facilities if possible. The number of such admissions in State mental hospitals dropped for a while. In 1953, it was estimated that a thousand harmless senile patients a year were being admitted to the mental hospitals who did not belong there.[25]

Faced with this influx of aged patients, the department of mental hygiene made use of the Welfare and Institutions Code (sec. 5102) [26] to return such patients to their communities. In September 1953, a letter to all superior court judges, district attorneys, county welfare departments, health departments, boards of supervisors, and court medical departments called attention to the problem of the commitment of many aged persons who are only suffering from the physical infirmities of old age. These aged persons, it was claimed, are often not mentally ill and should be cared for in their homes or in some facility in their communities. Their mental condition is such that they do not need treatment in a State mental hospital, nor should they take up beds or the time of the hospital staffs that should be used for mentally ill patients.

The welfare and Institutions Code (sec. 6733) provides that the department of mental hygiene shall discharge any patient who is affected with harmless chronic mental unsoundness, and that such

[22] Ibid., p. 9.
[23] California Governor's Conference on the Problems of the Aging, October 15–16, 1951, Proceedings. 296 pages. Sacramento, 1951.
[24] California Governor's Conference on Mental Health, March 3–4, 1941, Final Report. 99 pages. Sacramento, 1949.
[25] California. Department of mental hygiene, Report to Governor's Council, August 1953.
[26] "No case of harmless chronic mental unsoundness * * * shall be committed to the care and treatment of the mentally ill."

person, when discharged, shall be returned to the county from which he was committed, at the expense of such county. Accordingly, the department announced that all newly admitted civil patients who were found to be not mentally ill but merely affected with harmless chronic mental unsoundness would be discharged. The letter directed the superintendent of each State hospital to communicate with the responsible relatives or with proper county authorities in each such case prior to the discharge of the patient in order to make suitable arrangements for his removal from the hospital. In the event the patient was not removed from the hospital by responsible relatives or the appropriate county authorities, the hospital would arrange to have the patient returned to the county. It was made clear that the staffs of mental hospitals were prepared to cooperate in bringing about a more desirable placement for these aged persons as close to their own homes as possible.[27]

This new policy of the department of mental hygiene would not affect the more than 2,000 such patients then in State mental hospitals, but only those admitted after October 1, 1953, who were determined to be not truly mentally ill after examination by the hospital doctors. A reflection of this new policy was seen in a decrease in the rate of aged admissions to State mental hospitals during fiscal year 1954. There were 500 fewer admissions of mentally ill patients over 65 years than in fiscal 1953.[28]

This new policy also led to the consideration of the whole problem by the California Assembly interim committee on social welfare as a part of its study of State and county social welfare programs (H. Res. 195, 1953). A preliminary field investigation was made and hearings were held in Sacramento during January 1954.[29] The committee will report to the 1955 legislature. The problem of senile patients in State mental hospitals has been under consideration in a number of the other States.

CONNECTICUT

The Connecticut Commission on the Care and Treatment of the Chronically Ill, Aged, and Infirm was created by the 1945 general assembly [30] to alleviate overcrowded conditions in the State mental hospitals and to develop a broad overall rehabilitation program for the "unadjusted elderly."

The rehabilitation program was designed to provide care for four principal groups of the chronically ill and aged, one of them the so-called seniles—persons who as a result of age have demonstrated an inability to adjust reasonably to their usual environment and are considered cases of mild mental confusion but who do not have such mental aberrations as to be considered psychotic.

On the basis of experience with the other groups of chronically ill and aged (those needing specialized services of physical medicine and rehabilitation and those who require definitive medical care for a prolonged period), and to relieve the State mental hospitals, the commission designed a facility known as Woodruff Center. It will be an institution which will approach the problems of the elderly patient in a manner comparable to the approach to the physically disabled indi-

[27] California Department of Mental Hygiene, Report to Governor's Council, August 1953.
[28] Ibid., June 1954.
[29] California Legislature, Assembly. Interim committee on social welfare, Progress Report on the "Non-psychotic Senile" and Related Problems, March 1954; 20 pages. Sacramento, 1954.
[30] Public Act No. 437.

vidual, rather than viewing the elderly patient as one whose problem is essentially psychiatric. It is designed for long-term definitive care as well as complete rehabilitation of the physically disabled and aging.[31]

A former hospital building, Woodruff Center will have 135 beds ready for occupancy in the fall of 1954. Sixty of the beds will be set aside for a controlled study of unadjusted elderly patients from the State mental hospitals.

If the commission is to be successful in developing an approach to care and treatment that will relieve not only the mental hospitals but other institutional facilities of long-term custodial cases, it must concentrate on helping those who have a good potential for rehabilitation. When patients admitted to the commission's facilities reach maximum improvement, they will be discharged to the most appropriate environment available, including home care and foster homes. Eventually, additional provision may have to be made for those persons who in spite of the best services available still require permanent care. At present, this function is being performed by the private chronic and convalescent hospitals throughout Connecticut, which have approximately 5,000 beds.[32]

Institutions do not offer a complete solution to the problems of the chronically ill and aged.

> Adequate care and treatment require the cooperative efforts of all individuals and agencies in any way concerned with their place in society.

The commission has grant-in-aid funds at its disposal which have been used in assisting private, nonprofit hospitals in Connecticut to improve their standards of care. These funds are now being made available for the development of local efforts in home-care programs, protective workshops, foster-home programs, etc.[33]

A pilot program designed to reduce overcrowding in Connecticut's mental hospitals has been announced by the department of mental health, the commission on care and treatment of the chronically ill, aged, and infirm, and the State tuberculosis commission. The eight-point program includes enlargement of the present program for transfer of nonpsychotic patients from mental hospitals to other State facilities.[34]

KANSAS

Perhaps the greatest problem in the Kansas public-assistance program, as well as a major one in the institution program, is the provision of adequate care for senile individuals.[35]

Many of the State's seniles are cared for in the State's mental hospitals. Others are housed in county homes, county convalescent hospitals, and other county institutions. The remainder are cared for in private institutions and boarding homes. The present facilities offered by these three arrangements are no more than adequate to meet the problem today, and will not be adequate for the increasing load in years to come.[36]

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[31] Shindell, An Approach to the "Unadjusted Elderly," Public Health Reports 69: 734–737, August 1954.
[32] Ibid., p. 736.
[33] Shindell, An Approach to the "Unadjusted Elderly," Public Health Reports 69: 737, August 1954.
[34] State Government 27:197, October 1954.
[35] Kansas. Department of Social Welfare, Public Welfare in Kansas; Fifth Biennial Report, July 1, 1950, to June 30, 1952; 122 pages. 1952.
[36] Ibid., p. 113.

Facilities for the care of seniles are inadequate at the State mental hospitals. For some years the increase in the number of the aged has caused a serious congestion in the State hospitals. On 1950, there were approximately 900 seniles out of a total of 1,400 inmates at Topeka State Hospital. About 400 of these persons could have been released if proper quarters could have been found for their care.[37]

Provision of additional or expanded institutional care for seniles by counties or other political subdivisions of the State presents many problems. If the counties provide additional institutional care a new source of revenue must be found. Even if such a revenue were available, the problem would be difficult in the smaller counties where the numbers requiring such care would not justify the establishment and maintenance of institutions.

The 1953 Kansas Legislature authorized counties to sell their county farms and buildings and to erect, purchase, construct, and manage homes for their aged.[38] The matter of whether or not the county shall levy a special property tax for the establishment of the home for the aged or whether the county shall sell the county farm must be voted upon and approved by the voters of the county.[39]

The care of senile persons in private boarding or nursing homes presents an immediate and practical advantage to the State and counties of Kansas. It is the only type of such care for which Federal Social Security Act funds are available. The department of social welfare [40] suggests that creation of new private institutions and facilities to provide boarding, custodial, and convalescent-home care to aged persons can impose a substantial burden on the community in which the institution is located. Such a facility inevitably attracts persons from a wide area. If such persons become indigent after admission and while resident in the institution, they can become the public-assistance responsibility of the county in which the facility is located. The Social Security Act does not permit any county residence requirement. Until some method is found to protect the public assistance funds of individual counties, local authorities cannot be expected to work toward the establishment of new care institutions or the expansion of existing ones.

MASSACHUSETTS

At present many aged persons take refuge in private nursing homes or in State hospitals. On February 1, 1952, there were 10,000 persons aged 60 or over in Massachusetts State mental institutions—approximately one-third of the total number of patients.[41] Of the 10,000 patients, many were mildly confused individuals who would never have had to end their days in a mental hospital if adequate provision had been made for them before it was necessary to commit them.[42]

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[37] Kansas. Legislative Council, Agenda for Council Meeting, May 13, 1953, p. 35.

[38] Council of State Governments, Recent Progress in the States in the Field of Mental Health (BX-290, February 1954), p. 21.

[39] The legislative council has recommended that Laws of 1953, ch. 167, be amended to provide procedure whereby boards of county commissioners may issue bonds for the purpose of purchasing sites and erecting buildings designed as boarding homes for the aged, to be leased to private persons qualified to operate such homes. Kansas. Legislative Council, Publication No. 193, November 1954.

[40] Kansas. Department of Social Welfare, Public Welfare in Kansas (1950–52), p. 114.

[41] Massachusetts Special Commission to Study and Revise the Laws Relating to Public Welfare, Ninth Report (1952), p. 6.

[42] Massachusetts Governor's Committee to Study State Hospitals, Report (1953), p. 22.

An attempt to segregate senile patients from those who need more intense psychiatric and medical care has been made (acts of 1952, c. 464). A former farm colony building at Foxborough State Hospital has been converted into a building for "confused senior citizens."[43]

A comprehensive program of care for the aged was proposed by the Massachusetts Governor's Committee to Study State Hospitals. It included the establishment of clinics for aging citizens, improvement of nursing homes, and provision of State and other public nursing homes.[44]

The committee recommended that geriatric clinics be established in general hospitals throughout the State under the auspices of the State department of health (such a clinic has been conducted at Peter Bent Brigham Hospital since 1940). In addition to clinics for the aged, day care facilities in general hospitals should be provided. Aged persons could come to these centers for medical and nursing care daily, allowing treatment and care of many patients who would not accept and would not require admission to a hospital.

For persons who require medical care and nursing which cannot be provided at home, there are private nursing homes, licensed and supervised. Improved inspection and a gradual raising of standards would make the nursing homes an adequate answer to the needs of a large portion of the aged who are not sufficiently ill to require hospitalization.

The supply of beds in nursing and boarding homes is not sufficient to meet the demand, and there appears to be a need for provision by the State and other governmental units for such accommodations.

During 1953–54, the Massachusetts General Court established a council of the aging, to coordinate the various programs on the problems of the aged, and authorized the State health department to cooperate with local authorities in organizing clinics for the aging. Two hospitals were set aside for the elderly—one for the care of senile cases and another for research in chronic diseases of older people.[45]

MINNESOTA

Almost every phase of Minnesota's mental health program is complicated or adversely affected by the "senile problem." [46] On June 30, 1951, 31.1 percent of all patients in the State mental hospitals were 65 years of age or over. Of these 3,655 patients, 1,546 had no diagnosis other than that of senile or cerebral arteriosclerosis. It is estimated that between 600 and 700 senile patients in State mental hospitals are "sufficiently stable to receive adequate custodial care under a family type program, a welfare home program or in a nursing or convalescing home." [47]

There were several reasons for the extent of Minnesota's senile problem in mental hospitals. The commitment law was changed to admit "senile and nervous persons." The maximum cost to a patient or responsible relative who was married or had other dependents was $10 a month for care in a mental hospital. The homestead of an older person was not subject to lien if the person was in a mental hospital, thus allowing the heirs to inherit the homestead clear of

[43] Massachusetts Special Commission on Public Welfare Laws, A Report on Laws * * * Relating to * * * Problems of the Aged (1954), p. 25.
[44] Report, December 11, 1953. 67 pages, Boston, 1954.
[45] National Municipal Review 43: 412, September 1954.
[46] Minnesota Legislature Interim Commission on Youth Conservation and Mental Health Programs, Report Relating to Mental Health Programs. 102 pages, Minneapolis, 1953.
[47] Ibid, p. 39.

encumbrances. Wide publicity had been given to the new geriatrics units built at some mental hospitals. There had been a general improvement in care of patients at mental institutions and there was a shortage of nursing and rest homes in many communities. Some Minnesota counties have kept senile patients in their home communities—Cook Home or Arlington Home in Duluth, or Ramsey County Home in St. Paul, are county-operated institutions for the aged and chronically ill. In other areas, commitment of a patient as a senile has been the only way for a county to assure the patient adequate care.[48]

Recommendations, designed to protect older persons and others from being unnecessarily committed to State institutions and to remove the financial incentive from relatives and counties to commit to mental institutions, were made by the legislature's interim commission on youth conservation and mental health programs.[49]

Specifically, the commission proposed that the director of the division of social welfare prepare for each county in the State an average county nursing-home charge rate. This rate should be the average payment for residents of that county supported in nursing homes through the OAA program. Accompanying this rate, the director should set forth the amount which represents the county's share per person of such average home payments.

For aged patients committed to State mental hospitals, charges to the patient or responsible relatives would be the average county nursing home charge rate of the county where the patient has legal settlement or a portion according to ability to pay; except that for each patient who is or whose responsible relatives are unable to pay as much as one-half of the average county nursing home charge rate, the director of the division of public institutions would bill the county of legal settlement for one-half of such rate. The county so billed would remit to the State for each patient an amount equal to the county's share of the average county nursing home charge rate for that county plus one-half of such amount as the county may recover on an ability-to-pay basis from the patient or responsible relatives.[50]

Local communities were urged by the Commission to take steps to provide adequate facilities for care of the aged. (A 1951 law authorized counties or an association of counties to establish such institutions.) This function is more suitable for local jurisdictions than for the State and the legislature was urged to consider the desirability of providing State aid to local communities for the establishment of facilities for the aged. Minnesota's Commission on Aging recommended better construction of homes and institutions for the aged, and closer affiliation of such institutions with general hospitals. To protect the older persons, the commission advised more adequate support of licensing and inspection services. To enable older persons to remain within their own homes, the commission proposed community home-nursing services.[51]

The 1953 legislature made major changes in public policy in providing care for the mentally ill in Minnesota—more responsibility was placed on local government for providing this care.[52]

[48] Minnesota welfare 10: 8–10, August 1954.
[49] Report Relating to Mental Health Programs (1953), p. 85.
[50] Ibid.
[51] Minnesota Commission on Aging, Minnesota's Aging Citizens. 68 pages, St. Paul, January 1953.
[52] Minnesota welfare 10: 8–10, August 1954.

If local governments assume a greater responsibility for the care of the senile aged, local officials foresee several problems—more services mean more costs and more local taxes; for many of the senile aged, institutional care is the only answer and few of the counties have county-operated or county-sponsored nursing homes and few counties have the financial ability to construct new buildings or to pay for their operation after they are constructed; and some counties are too small to operate a home.[53]

Further study of the problem was proposed to the institute on aging held at the University of Minnesota, June 30, 1954—consideration of the best estimate of the number of patients who might be able to get proper care outside of the mental hospital, based on findings in cases of individuals who would have a real chance of getting along well in home surroundings; study of how local government is going to finance these additional services; consideration of the granting of subsidies for the construction of adequate nursing home facilities, for necessary social services and for the cost of patient care in a private home or local institution; study of the possibility of considering mental health care on a basis similar to that followed in providing medical care—if the patient could not get along well in a private home, space would always be available in a nursing home, and if more complete facilities were required, the patient could be sent to a State hospital.

NEW YORK STATE

A blueprint for State action on behalf of the aged was presented by the New York State Joint Legislative Committee on Problems of the Aging in its report for 1950.[54] The proposed plan stressed the local community approach. However, the State would bear its share of the responsibility by providing financial assistance wherever justified, technical assistance and standards to assure uniform, high-level administration, and a central coordinating agency of various departments to give the State program leadership, direction and coordination.

The New York State committee on aging was the first such group in the country to study the complex, multifaceted problems of "senior citizens." On the issue of whether there are any aged in the State's mental hospitals who could be cared for better in any other way, the committee found a division of viewpoint, with State psychiatrists generally leaning to the opinion that it is false to say there are aged in the State hospitals who need not be there.

> In addition to the question as to whether or not our arteriosclerotic or senile could be given custodial care in other types of facilities or in their own homes is the issue as to whether or not the State should properly assume responsibility for these cases.[55]

According to the New York State Department of Mental Hygiene, the senile aged—

> should be placed in a mental institution because the sort of care that they need reaches the quintessence of perfection in

[53] Ibid.
[54] Young at Any Age (Legislative Document (1950) No. 12), p. 14.
[55] New York State Joint Legislative Committee on Problems of the Aging, Enriching the Years (Legislative Document (1953) No. 32), p. 42.

such an institution where the treatment, the nursing and attendant care, the provisions are all there for these people plus the experience of many, many years.[56]

Recently, the New York State committee on aging has been more concerned with the mental-health aspects of the problem. In its 1954 report,[57] the committee pointed out the fundamental responsibilities of psychiatrists—to develop a long-range and short-range research program in gerontology, directed toward reduction of institutional population; to advise public officials and taxpayers as to whether to keep building more and more State mental hospitals to house the senile or whether they could be cared for by and in their home communities; to provide mental hygene clinics which will also cater to the aged; and to distinguish carefully between those who need institutionalization, partial supervision, foster or home care.

Definite progress has been made in New York State—an experimental geriatric building to be erected at Middletown State Hospital was authorized by the 1953 legislature; segregation in the State mental hospitals in separate geriatric or infirmary services is now close to achievement; and the research unit of one State hospital is being reorganized to devote its entire attention to arteriosclerotic and senile changes.[58]

The realities of the situation in New York State are suggested by the fact that Supreme Court Justice Benjamin Brenner disclosed recently that he had "reluctantly" certified four elderly sane persons as mentally ill to get for them the custodial care they needed.[59] They were homeless, neglected seniles and the New York City Welfare Department claimed lack of funds for their placement in private institutions or old age homes.

Justice Brenner stirred a storm of controversy. Welfare Commissioner McCarthy said his department had all the money it needed to care for the aged but there were not enough suitable places to send the senile aged. He proposed the use of Ellis Island. Of the facilities for 3,500 persons, perhaps 2,000 could be used for senile men and women.[60]

Miss Ollie Randall, one of the country's leading specialists on problems of the aging, termed the justice's action a "welcome shock." She pointed out that services and facilities of any kind for the senile aged are woefully inadequate and New York State has no established criteria for the selective placement of the senile aged.[61]

Expansion of the foster or family placement programs for older persons who are helpless and are in need of special care, but who are not insane, was urged by the executive director of the Welfare and Health Council of New York City. Such homes could be used for placement before commitment to mental institutions as well as for placement after treatment in a mental hosptal.

At a hearing held by the New York State Joint Legislative Committee on Problems of the Aging, Senator Desmond suggested that a completely new approach to the care of the aged in State hospitals

[56] New York State Joint Legislative Committee on Problems of the Aging, Growing With the Years (Legislative Document (1954) No. 32), p. 87.
[57] Ibid., p. 24.
[58] New York State Joint Legislative Committee on Problems of the Aging, Growing With the Years (Legislative Document (1954) No. 32), p. 24.
[59] New York Times, December 10, 1954.
[60] Ibid., December 17, 1954.
[61] Ibid., December 16, 1954.

would have to be made. Putting the number of such aged at 23,805, he declared that a program of State aid to localities to care for the senile aged in nursing type buildings in their hometowns might have to be substituted for "endless building of new supercities of mental hospitals.[62]

The New York State mental hygiene law specifically excludes from commitment all persons not mentally ill. The dotard or persons suffering from senility is also excluded. Justice Brenner has suggested an amendment to the mental hygiene law to permit a justice to certify a senile patient as a "helpless aged person." They would be sent to a State mental institution until discharged to the department of welfare.

NORTH CAROLINA

In North Carolina, the State board of public welfare administers, through county welfare departments, a community placement program for senile mental patients.[63]

In 1950, the commission to study the problems relating to the care of the aged reported that existing legislation was adequate and endorsed the program for community living already developed by the State board of public welfare. The commission also recognized that these services available to State hospital patients were the most economical as well as the most personally satisfying way of meeting specialized needs of the senile patient.[64]

Under the community living plan, the supervisor of services to the aged of the State board visits each State hospital monthly and confers with the social service department about the patients judged ready for release. The characteristics and needs of each patient are considered in planning for a suitable boarding home. The State board furnishes the liaison between the State hospitals and the county departments of public welfare.[65]

The county department of public welfare assumes the responsibility for finding a suitable home for the patients who logically can be placed most acceptably in that county. The county department also furnishes continuous supervision of the boarding homes into which released patients are placed and provides the financial assistance needed for the patient's boarding home care. Through continuing casework services the county department helps the patients become adjusted in their new environment.

In the main, released patients are provided for in boarding homes by public assistance. Where the need justifies it, these patients are eligible for the maximum grant of $55 a month. When a patient has been in the State hospital for a period of more than 2 years and needs care that cannot be secured for the maximum public-assistance grant, the State board supplements the public-assistance grant out of a special State appropriation set up for this purpose. In 1953–54, the amount available for this purpose was $25,000. In a few instances where hospitalization has been less than 2 years, general assistance funds of a county are used to supplement public-assistance grants for boarding home care. Many patients are provided for by guardians

[62] New York Times, December 16, 1954.
[63] Pemberton, Returning Senile Patients to the Community, Public Welfare News (North Carolina State Board of Public Welfare) 17: 4–6, March 1954.
[64] Ibid.
[65] American Public Welfare Association, Helping Older People Who Have Been in Mental Hospitals (1954), pp. 5–6.

or relatives who cannot accept the patient in their own homes but can pay some part of the cost of boarding home care.

The placements made by the county welfare departments from the State hospitals have increased from about 85 on June 30, 1952, to over 400 as of June 30, 1954.[66]

SOUTH DAKOTA

In April 1953, approximately 55,000 persons (over 8 percent of the people in South Dakota) were 65 years of age and over and of these it was estimated that about 1,700 were senile.

South Dakota provides care for the chronically ill, including the senile, at the State school and home for the feebleminded, the State tuberculosis hospital, the soldiers' home, and the State hospital. Additional facilities in the State are provided by county and community hospitals, church and fraternal organizations, private nursing homes, convalescent homes, rest homes, board and guest homes, and old-age homes.

The outstanding feature of the facilities for the care of the senile is the poor quality of service and facilities provided, particularly the insufficient and unqualified professional and nonprofessional staffs. The lack of adequate local facilities for care of senile patients is resulting in commitment of these patients to the State hospital.

A State administered plan with regional organization has been recommended by Griffenhagen & Associates for the care of the senile and chronically ill in South Dakota.[67] The program and facilities for the care of the senile should be parts of the integrated program and facilities for the performance of health and welfare functions of the State. A proposed department of health and welfare should be charged with responsibility for the planning, supervision, and control of the State programs and facilities for the care of the senile and chronically ill.

The State should be divided into eight health and welfare regions, and a chronic disease hospital provided in association with an existing general hospital in the largest urban center in each region. The regional hospitals should be 50 bed units, planned to facilitate the most efficient nursing care for the aged group, and leased ($1 per annum) to the associated or adjacent general hospital with the understanding that the hospital management will make available to the State health and welfare department the regional hospital offices and facilities. Any such agreement should provide for bed distribution as between private and public charge patients; the minimum monthly charge at the chronic disease hospital for a public charge patient should be the amount of public assistance provided to the patient, less $5 a month to be advanced to him for personal necessities.

The commitment laws of the State should be amended to allow for home care and early discharge of the patient on recommendation of the medical board of the staff of the State hospital and to provide for voluntary admissions to the State hospital.

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[66] University of North Carolina, News Letter, vol. 40, No. 13, November 24, 1954.

[67] South Dakota Legislative Research Council, The Care of the Senile of the State of South Dakota, by Griffenhagen & Associates, 110 pages. Pierre, January 12, 1954.

TEXAS

In Texas, approximately 22 percent of all patients in State mental hospitals are 65 years of age, and 20 percent of all present admissions are in that age group. There are several hundred aged patients who have been mentally ill, are now recovered sufficiently to be released, but they have no home to which to return. A large number of the aged patients are not mentally ill but require medical and nursing attention which could be given in a general or specialized geriatric hospital A substantial number—about 50 percent of all first admissions over the age of 65—die before they have been in the hospital 1 year. They need only general medical care, but lacking funds and family care, they use the State mental hospitals.[68]

So that the Texas mental hospitals may be used exclusively for those patients who are mentally ill, the Texas Research League has proposed, among other things, that the legislature define the responsibility of the State for the care of geriatric patients. This definition should include who is responsible for the medical problems (nonmental) of the indigent aged and should establish the process necessary to release to the proper facility the homeless indigent aged person who is not mentally ill.[69] Geriatric patients with chronic medical ailments should not be admitted to State mental hospitals, and a State study committee on the aged should be established.

VIRGINIA

It has been said that many old people are committed to State mental hospitals because they have become a burden to their families, but are not really mentally ill. In Virginia, very little foundation for such a statement was found by the State department of mental hygiene and hospitals.[70] In 1953, of 613 aged patients admitted because of disorders of the senium, less than 5 percent were without a psychotic reaction.

An increasing number of aged persons are in need of hospitalization because they have mental disorders which the families are unable to care for in their homes or in private facilities. For the years 1940, 1950, and 1953, senile patients constituted approximately 7 percent of first admissions to Virginia State hospitals.[71] Of the resident hospital population, on June 30, 1953, 32.7 percent were 60 years of age and over, and 16.2 percent were 70 years of age and over. In 1940 it was 26 and 10.5 percent, respectively. This indicates the large increase in the older patients, especially when the population of the hospitals has had a 14.9 percent increase in total resident population.[72]

A local program for the care of seniles, among others, has developed in southern Virginia. Thirteen counties are joint owners of a hospital for the chronically ill. Patrick Henry Hospital, originally an Army camp, was bought by a group of local citizens, headed by a physician. Renovation and remodeling were financed by a 20 cents per capita assessment on each political subdivision.[73]

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[68] Texas Research League, For Those Committed to Our Care (1954), p. 41.
[69] Ibid., p. 42.
[70] Virginia Department of Mental Hygiene and Hospitals, The Aging Patient in Our Hospitals, 24 pages, Richmond, 1954.
[71] Virginia Department of Mental Hygiene and Hospitals, The Aging Patient in Our Hospitals (1954), p. 10.
[72] Ibid., p. 21.
[73] Aging (U. S. Department of Health, Education, and Welfare) (10): 3, March 1954.

The institution serves 13 counties and 5 cities. It remains a private institution with its own elected board of directors. This enables OAA patients to continue to receive their benefits and pay their own way for services rendered. Patients range from 40 to 107 in years, and most of them suffer from paralysis, heart trouble, rheumatism, diabetes, or senility.

WISCONSIN

Wisconsin has no planned and integrated program for the care of the chronically ill and infirm aged, except those who are mentally ill and tuberculous. Aged persons who are mentally or physically infirm receive care in general hospitals, infirmaries attached to homes for aged, and private nursing homes. Some 1,800 aged who are senile or suffering from cerebral arteriosclerosis share the overcrowded facilities of the county and State mental hospitals.[74]

As of 1952, 35 county homes and infirmaries were operated and maintained by counties under the jurisdiction of the State department of public welfare. Over 70 percent of the residents of these county homes were 65 years of age and over; 21 percent were senile; 35.5 percent were in need of some personal attention, and 17.9 percent were bedridden.[75] Under State law, counties may construct, maintain, and operate hospitals for the detention and care of chronic mentally ill persons, inebriates, and drug addicts. On June 30, 1951, 36 counties operated such hospitals which were overcrowded by 40.7 percent. Of the 12,344 patients in these hospitals, 1,517 were classified as senile.[76]

It can never be possible to provide public facilities for all the aged who require institutionalization. Other ways of caring for the infirm and disabled aged must be found. Within the last few years, attention has been directed toward home-care programs as promising alternatives to the more costly public institutions. In home care, the Wisconsin Legislative Council sees the advantage of providing a means of saving funds and at the same time instituting a program more beneficial to the persons in need of care.[77]

A continuing committee on the problems of the aging was recommended by the council. Among other duties, the committee should promote the establishment of community councils or committees for the care of the aged and chronically ill.

OTHER STATES

In New Jersey, almost 30 percent of the total patient population in State and county mental hospitals is 65 years of age and over. The proportion of elderly patients entering mental hospitals has increased from 17.6 percent in 1933 to 35.8 percent in 1953.

Many of the mental patients who enter the hospital in their later years are less likely to respond to therapeutic treatment, often linger on in the hospital, and frequently die there of physical ailments. The question is raised therefore, if the mental hospital is to perform its primary curative function, whether elderly mental patients (unless greatly disturbed) needing nursing care could not be cared for in other ways—nursing homes, boarding homes, family homes, etc.[78]

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[74] Wisconsin Legislative Council, 1953 Report, vol. 1, pt. 1, p. 18.
[75] Wisconsin Legislative Council, 1953 Report, vol. 1, pt. 2, p. 136.
[76] Ibid., p. 139.
[77] Ibid., p. 145.
[78] New Jersey Department of Institutions and Agencies, The Aging in Mental Hospitals in New Jersey (1954), p. 5.

On the other hand, the Michigan Governor's Commission To Study the Problems of the Aging,[79] found that the per diem cost of maintenance of senile patients at State mental hospitals is much lower than could be expected in smaller institutions that had to carry their own full costs of administration; the policy that has been followed of housing senile patients apart from those giving evidence of more disturbed psychotic conditions could be expanded. To keep elderly persons in their own homes after they begin to suffer severely from physical infirmities of age would be impossible without the development of auxiliary services.[80]

Of the 975 patients in Rhode Island's State Hospital for Mental Diseases, one-fourth are aged 65 years and over. Many of these patients are not mentally ill, and the hospital has been successful in placing a limited number in foster homes.[81]

The development of geriatric centers in localities has been suggested as an alternative to sending aged persons to State institutions unless they require specialized services. Such centers should be associated with general hospitals, and should include a clinic for counseling on health problems.

Seniles form one of the highest categories of admissions to Oregon's State mental hospitals.[82] Their treatment rarely amounts to more than custodial care and the prescription of physical medicine.

> They should be cared for in an institution separate from a State mental hospital.[83]

A 1951 law (ch. 195) which was approved by the voters at the 1952 general election,[84] authorized a domiciliary hospital for the care and treatment of aged persons afflicted with mental disease and directed the hospital to be located within a 20-mile radius of the county courthouse of Multnomah County.[85]

The 1953 Oregon Legislature enacted a bill which referred to the people a plan to expand the previously proposed and approved domiciliary hospital for the aged mentally ill to a general mental hospital in the Portland area. Arguments for the bill included those that there is insufficient experience with hospitals set up solely for the aged mentally ill to justify public expenditure of tax money for such an institution; and that there is a growing trend toward establishment of separate geriatric units in general mental hospitals.

Arguments against the bill included the fact that Oregon's aged population is increasing more rapidly than the general population and a facility for mentally ill aged deserves first consideration; that in a general hospital, doctors tend to spend less time with senile patients than they do with patients with more hopeful prognosis. One-third of the patients in the present mental hospitals are aged mentally ill and if a hospital is to be built, it should be for this group.[86]

The 1953 bill called for a more comprehensive hospital which would provide almost as many beds for the aged mentally ill as were con-

[79] Report, December 12, 1952, p. 46.
[80] Ibid., p. 55.
[81] Rhode Island Governor's Commission To Study Problems of the Aged, Old Age in Rhode Island (1953), p. 53.
[82] Portland City Club, Bulletin 32: 288, October 19, 1951.
[83] Ibid., 33: 70, October 17, 1952.
[84] Oregon constitution (art. XIV, sec. 3) provides that all public institutions must be located in Marion County except when otherwise authorized by the legislature and approved by the people at the next general election.
[85] Portland City Club, Bulletin 35: 213, October 15, 1954.
[86] Portland City Club, Bulletin 35: 215, October 15, 1954.

templated under the original referendum. Expansion of the domiciliary hospital into a general mental hospital was approved by the electorate on November 2, 1954.

County homes in Pennsylvania are not maintained for the exclusive use of the aged, although the majority of the residents of these homes are aged 65 and over. County homes are under the supervision of the State department of welfare and are operated by the counties.

Patients in State mental hospitals who have nonpsychotic illness may be transferred to county homes, and the State pays to these homes an administratively fixed fee, which in 1952 amounted to $1.25 per patient per day.[87] Unlike the residents of licensed commercial convalescent and nursing homes and boarding homes, the aged residents of county homes are not eligible for old-age assistance.[88]

In South Carolina's State hospital there are several hundred senile patients receiving, in the main, purely custodial care. The additional cost of administration and care required for these patients is greatly above the expenditure which would have to be made if these patients were housed in buildings designed to receive them.[89]

The number of dependent aged is increasing each year. Because most of the counties do not have facilities to care for them, many aged persons suffering from "the aging process," who require nothing more than nursing or custodial care, have been committed to the State hospital.

Facilities constructed for the care of the aged who are emotionally or mentally disturbed or deteriorated would result in better care and a more economical operation than the facilities at the State hospital provide. Interest is increasing in nursing homes in each county.[90]

"While the average senile patient is psychotic medically and legally," the Maine Committee on Aging found a very small percentage of senile psychotics require institutionalization. Most senile patients are problems of nursing care and the committee felt that these patients get better care at the State hospital than they would get at most nursing homes. It would be a mistake "to attempt to maintain separate institutions for the care of the aged" and "it is more satisfactory to have a separate geriatrics unit attached to the State hospitals for the care of the senile aged." [91]

[87] Pennsylvania, Joint State Government Commission, Sixty-Five (1953), p. 60.
[88] Ibid., p. 61.
[89] South Carolina, General Assembly, Committee To Study Public and Private Facilities for Mental Health and Mental Health Laws, Report (1952), 46 pages.
[90] State Government 27: 168, August 1954.
[91] Maine Committee on Aging, Golden Years (1954), p. 19.

17. SELECTED PAPERS FROM THE MERRELL GERONTOLOGICAL SYMPOSIUM: CONSTRUCTIVE MEDICINE IN AGING, CINCINNATI, OHIO, JANUARY 13, 1956 [1]

Mental Adjustment to Physical Changes With Aging

By Karl M. Bowman, M. D.

and

The Medical Care of the Debilitated, Hospitalized Aged

By Freddy Homburger, M. D.

FOREWORD

The individual is indivisible; psyche and soma are one. Every individual is modified by his age, health, and maturity. These three aspects of life vary independently of each other. Each is separately amenable to modification by many kinds of experiences. Thus the problems of the mind in later life cannot be segregated from the problems of somatic health and disease, the stresses peculiar to senescence and senescents, and the emotional homeostatic capacities developed by maturation.

The relativity of health becomes increasingly conspicuous with aging. As health, both mental and physical, is much more than the absence of disease, possessing quantitative attributes, it is the primary purpose of constructive medicine to build greater health and thereby prevent illness and premature depreciation. Constructive medicine is anticipatory; it is foresight applied. Guidance in nutrition, hygiene, modus vivendi, education, and cultivation of maturation may be asked of all classes of physicians. Constructive medicine is not a specialty, though it does demand much of the physician: comprehension of etiologic factors, knowledge of human physiology and psychology, insight, foresight, and the ability to instruct effectively.

The absence of clear division between health and disease is nowhere more obvious than in mental functioning in both intellectual and emotional realms. Normal is most nearly synonymous with mediocre; it is near average or mean. Gross asymmetry is hazardous. Maximal intellectual superiority, or genius, is dangerously close to disease unless paralleled by optimum emotional stability. Homeostatic competence is a factor of personality maturation. The question of who is mentally ill and who is not may hinge upon relatively local mores. For example, when a patient in a State hospital was asked the reason for his commitment, he replied: "It is a matter of democracy. I felt most of the people in my town were crazy; they thought I was. The majority won." This is one of the hazards of originality, iconoclasm, and intellectual independence. Nevertheless, these are the seeds of progress and their cultivation demands courage.

[1] From Geriatrics, vol. 11, No. 4 (April 1956), pp. 136–145, 163–172.

This symposium on the problems of the mind in later life is a collection of the papers presented in Cincinnati on January 13, 1956, at the second Merrell gerontological symposium focused on constructive medicine in aging. (See Geriatrics 10:149 to 188, 1955, for the papers of the first symposium.) Sponsored by the William S. Merrell Co. and with Dr. Maurice Levine of the University of Cincinnati as moderator, this was a most successful meeting. The six contributors whose papers follow are all men of exceptional stature in their respective clinical and scientific spheres; their discussions cover the major areas of this immensely complex subject with clarity and brevity.

It would be pointless to discuss the individual papers here. Every participant emphasized that the core of the problem lies in the maintenance of emotional equilibrium under conditions of stress. Neurotic and psychotic disorders, other than those directly consequent to organic disease or intoxication of the brain, are caused by failure of the homeostatic mechanisms to adapt adequately to stress. Thus the genesis of mental illness involves two types of variable factors: the exogenous stresses of life and the endogenous homeostatic incompetence. Though often similar, the exogenous vicissitudes vary individually in character, intensity, sequence, duration, and coincidence with age changes. The effectiveness of emotional homeostatic processes, largely dependent upon the extent of cultivated maturity, is likewise highly variable. In other words, success or failure in adaptation depends upon the intensity, nature, and duration of attack and upon defensive ability.

Control of the environment to minimize the threat of stress is the older, conventional technique of approach in preventive medicine. Water is purified to prevent typhoid fever; swamps are drained or oiled to protect us from malaria. Parents were taught that children must be so sheltered that they are never exposed to fear. But this sort of pampering can be carried to a detrimental extreme. How can courage be developed in the absence of fear? Or active immunity to streptococci if every minor infection is passively erased by immediate administration of antibiotics in massive does?

Application of graduated stresses stimulates development of defensive mechanisms. This is the newer and as yet unappreciated tactic of building defenses as a part of constructive medicine. Education of the personality toward maturity with its magnificent equanimity is constructive. Planned and graduated exposure to stress, be it physical or psychic, nurtures maturation, and increases the defensive capacity. Identification of the predictable stresses of later life is invaluable as a guide in such preparatory training, but stress is not necessarily involved in every constructive experience. Careful study of the papers of this symposium will be a highly profitable experience, free of stress.

Many of the serious problems of the mind in later years are not caused by people growing old too early in life, but arise because many of us remain too young and immature as we age.

Edward J. Stieglitz, M. D.

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Mental Adjustment to Physical Changes With Aging

Karl M. Bowman, M. D., San Francisco, Calif.

This paper attempts to correlate physical with mental changes in later life; discusses the wide variations, both in intellectual capacities and emotional makeup, and the changes produced by old age; calls attention to newer material showing increase of intellectual functions up to 50 years of age; and points out the variations and inconsistencies, existing regarding retirement

I would like to review briefly why the study of geriatrics is becoming so important, and to mention a few of the difficult problems arising because of the increase of our aging population.

There has been an enormous increase of persons over 65 and this growth is expected to continue for some time. From 1900 to 1950, our total population almost doubled. During this same 50 years, the number of persons over 65 more than quadrupled, going from 3 to 13 million. Compared with this doubling of population, the total number of patients in mental hospitals has tripled and the number of patients over 65 has increased nearly 10 times. To the psychiatrist, therefore, the problem of mental disorders in later life is becoming increasingly important.

This growth in the number of aged persons has had a profound effect on our whole culture and on our industrial organization. Are policies now pursued by the Government and by industry sound or should they be changed? If we are to deal with the situation intelligently, we must know what physical and mental changes occur in aging persons.

It has been said time after time that the aging process begins with the moment of conception, and that certain developments, changes, and alterations are inevitable with the passing of time. We know that the period of infancy, childhood, and adolescence is one of physical and mental development, and there is little doubt that the changes that occur up to the age of 18 or 20 are desirable and that the individual is steadily improving in all of his physical and mental capacities. If, however, we accept Kinsey's findings, the young male of 20 is actually past his maximum sexual capacity for orgasm.

The period from 18 to 25, or a little later, is considered to be the time of maximum physical strength and endurance. By the age of 30, most athletes in sports which require quick reaction time, endurance, and gross strength are on the decline. According to a recent report, the oldest active professional football player in the United States is 32 years of age. The years from 20 to 40 are held to be the period of maximum intellectual capacity, and such intelligence tests as the Wechsler-Bellevue allow for declining intellectual capacities after 35.

There seems to be much greater variation in the emotional makeup of the individual and less of a general formulation of how the emotional life progresses and regresses. The small child has strong and uncontrolled emotional drives which he expresses freely, but, by the time he reaches adulthood, he is expected to have developed his intellectual capacities and to have established a reasonable control over his emotions. There is also the general concept that with advanced age the emotions again get out of control and the individual returns to much

the stage of the infant. We even have the term, second childhood, to describe the changes in the older person, both emotionally and intellectually. Emotions are much harder to measure, however, and a quantitation of emotions is still difficult if not impossible. For this reason, we cannot speak with the same precision about what happens to individuals emotionally as about what happens intellectually.

PHYSICAL CHANGES AFFECTING EMOTIONS AND INTELLECT

There is a series of physical conditions which indirectly affect the intellectual function of the individual and his emotional reactions. All of the special senses become less keen. Eyesight is definitely affected; the individual begins in his forties to lose the ability to accommodate to near objects and requires bifocals for reading. There is commonly a decrease, extremely variable in amount, in hearing. Thus the individual sees and hears less of what is going on about him. He usually recognizes this fact. He may attempt to compensate for it or he may withdraw in a somewhat depressed and embittered fashion. In either case, a personality change occurs which is the secondary result of these changes in sight and hearing. Occasionally, a person will not wear glasses because he feels that it makes him look old, or he may refuse to wear a hearing device. Another important change is loss of teeth. Unless this is compensated for by excellent dentures, a number of changes may occur. He may live on a soft, poorly balanced diet, which may lead to serious protein, mineral, and vitamin deficiencies. This will decrease his energy and interest, will cause easy fatigability, and may produce severe emotional reactions because of the feeling of inadequacy and general loss of energy and interest.

With our cultural attitude such that everyone wishes to look young we find that some persons are disturbed by loss of hair, gray hair, wrinkles, and other physical evidence of aging. Here again the individual may deal with these changes in various ways, some of which are healthy and others not. He may go to the plastic surgeon to have the wrinkles removed. He may wear contact lenses which will not indicate the defect in eyesight. With regard to teeth, the situation is a little different, since there is no possible reason for not wishing to secure good dentures which will also be attractive. Then again he may refuse to accept the fact of aging. He may use all the artificial devices possible to look young and, in addition, may attempt to act young, in a manner which will fool no one but himself and which may lead to further conflict and feelings of inferiority.

The sexual life is also affected. We know that, in men, there is commonly a decrease in sexual capacity. According to Kinsey, this decline starts before 20 and is more or less steady. Probably, at age 65, about 50 percent of men are relatively or completely impotent. In women, according to Kinsey's findings, there is a somewhat different evolution of the sex instinct, with a plateau of sex ability until about the age of 55. This can be, and frequently is, affected by psychologic factors. Many women assume that, with the menopause, they will no longer be able to enjoy sexual experiences and, as a result of this emotional attitude, cannot do so. However, by 65 there is a noticeable drop in the sex capacity in women as well as in men. As a result, there has been a good deal written recently about the "third sex" or

"neutral gender." Such articles make the claim that the decrease of gonadal secretions coincides with a falling off of the male or female sex characteristics, and that, at about 60 to 70, a person begins to lose his sex identity, as far as the physiology of the body is concerned and, in part, as regards the psychology.

With this loss of sex capacity, many persons become quite depressed. Frequently, the old person indulges in a lot of fruitless sexual fantasies, which do nothing more than stir him up and make him more aware of his inadequacies. A large number of the cases of sex offenses with small children are found in such old men. Men who are relatively or completely impotent and who, because of their inability to obtain an erection, feel inadequate to making any sort of sexual approach to a grown woman, may resort to fondling little girls for a sort of vicarious sexual thrill. Here we have a mixture of both the original organic defect and the secondary results when the individual realizes that age has brought loss of an important function.

It should be pointed out that the loss of the sex drive is not regarded as a serious problem by some persons. They feel that they are freed from what may have been quite disturbing and upsetting drives, and that activities can be directed into other channels. Thus, this change may give serenity to some persons but in others may cause emotional turmoil, depression, or even final resort to suicide. All this again emphasizes the tremendous variation of individual reactions to the same apparent change.

INDIVIDUAL VARIATION IN MENTAL ABILITY

In any attempt to study mental changes in aging persons, it is important to emphasize the great individual differences that occur in intellectual and emotional makeup. Almost as important is the great variability in rate at which mental capacity is lost. This individual variation in innate ability and rate of loss makes any generalization difficult. As Crook has expressed it, "In any representative group of normal older people, aged 60 to 80, you are sure to find a sizable proportion who are actually faster than the average of any young group, in any mental function which can be measured." No two persons start life with identical endowments and they do not develop or deteriorate in exactly the same manner or at exactly the same speed.

We need further clarification of the use of the term "intelligence." Thorndike has said that intelligence is that which is measured by standard intelligence tests. Another definition of intelligence is the ability to learn and to solve new tasks. There are certain capacities labeled "wisdom or judgment," which cannot be tested adequately by present tests but which are really a special part of intelligence and are often more highly developed in old persons. Standard intelligence tests, therefore, do not measure all of these intellectual capacities. This point must be kept in mind in the discussion which follows.

It is difficult to separate completely the mental processes from the physical, but we can describe the physical changes of aging and then see how some of these changes correlate with and perhaps cause the mental changes.

CORRELATION BETWEEN PHYSICAL AND MENTAL CHANGES

The rate at which the individual burns up his body tissues as measured by oxygen consumption decreases with each decade of life. Throughout life, this rate is higher in men than in women. It is possible that women live longer than men because they do not burn up their body tissues as fast. At any rate, the energy output of the individual lessens with each decade. This seems in accord with the universal idea that small children and even adolescents have limitless energy and that the output decreases steadily the older they grow.

Here there seems to be a correlation between physical and mental. The speed of physical and mental reactions decreases with age. This slowing of reaction time is an important factor in athletics and, although it has no real effect on intellectual attainments, it is an important cause of decreased scores on standard intelligence tests, since many of these tests limit the time for answering. A person's general knowledge, reasoning ability, and memory may be unaffected, but he will receive a lower score because of the time limit set by the test.

We may also raise the question about intellectual activities which are carried out continuously. We are all familiar with the person who keeps himself in excellent physical shape by appropriate exercise, diet, and so on. Does intellectual exercise keep the individual in excellent mental condition? Does suitable and appropriate use of the mind keep intellectual powers functioning with minimum loss? There is strong evidence that mental activities, which are carried out regularly and habitually, tend to be preserved and show a slower rate of decline. A certified accountant or bank teller, even when 65 or 70, may solve simple arithmetic problems more rapidly and accurately than younger persons of equal or superior intelligence.

Let us look at other physical and mental factors. We know that, by 25 to 30, the brain has reached maximum size and that, by 35, definite atrophy will have set in. We also know that, except for the heart, nearly all the organs of the body start to atrophy at some time between 30 and 35. Can we establish any correlation between such atrophy and mental functioning? We know that there are many so-called silent areas in the brain and that there can be considerable loss of brain tissue without any apparent loss of mental functioning. We know that, for the ordinary human being, one kidney will take care of physiologic needs and that one testicle or one ovary will suffice for the internal secretions, a normal sex life, and copulation. Has nature been equally lavish with its supply of brain cells, and does the dropping out of cells, starting at about age 35, have no real effect on brain functioning until great atrophy has occurred?

Autopsy findings in persons dying at advanced ages show little correlation between mental symptoms and brain changes. Many cases that showed profound deterioration show only moderate brain damage at autopsy, and many cases, with excellent preservation of mental capacities until death at 70 or 80, show decided brain changes.

What effects do changes in other organs have? For example, we know that the liver is an important detoxifying organ. Is atrophy of the liver connected with decrease of detoxifying power, and thus with production of toxic conditions that interfere with normal mental

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functioning or normal emotional states? Since alcohol is broken down mostly in the liver, does the older person's decreased tolerance to alcohol link up with decrease in size of the liver?

Certain specific abilities seem to be lost gradually as part of the aging process. Memory seems to show a progressive loss from about 30 years onward, coinciding with, and possibly caused in large part by, atrophy of the brain. However, memory depends, at least to some extent, on the intensity of an experience and the person's interest in it. Thus, loss of memory may be partly caused by the loss of interest and lessened intensity of feeling which comes with increasing age. In the typical old person, memory loss is slight for childhood experiences, but much greater for newly learned material.

Learning ability decreases with age. One reason is that new learning may require breaking down of long-established patterns. This is more difficult for the old than for the young person, who has not had his habits established for so long a time. Again, learning ability is directly related to intensity of interests. Older persons often feel that, since the remaining life span will be quite short, there will be little opportunity or need for newly acquired knowledge or technics, hence they do not try to learn.

Reasoning ability and perception of spatial relations show definite deterioration with age. When the individual is called upon to deal with unfamiliar material or conditions the deterioration is quite noticeable. At any age, reasoning ability and awareness of spatial relationships are the abilities which tend to show the greatest loss with diffuse cerebral pathology. In general, verbal ability decreases less with age than do most measurable abilities. This is particularly true of vocabulary, general information, and verbal comprehension. Vocabulary tests reveal fewer signs of deterioration in the aged than do most of the standard intelligence tests.

Imagination, judgment, and wisdom seem to be affected to a more variable degree than are most functions. Many older persons have profound judgment and wisdom, and seem to belong properly in the councils of government and on the bench. Unfortunately, other persons of the same age show noticeable decrease in these functions and are entirely unsuited for such positions.

WHEN DOES INTELLECTUAL DECLINE BEGIN?

Although there seems to be universal agreement that age brings some decrease in intellectual functions, certain recent material makes it doubtful that intellectual deterioration starts in the thirties.

The first point is that going through a population and taking random samples tells us only what older and younger persons are like at the present time. It does not tell us what the present younger generation will be like 20, 30, or 40 years from now. Studies show that scores on standard intelligence tests increase with greater schooling.

Because of their better schooling, veterans of the Second World War made higher intelligence scores than veterans of the First World War. The many excellent studies made on samples of the entire population are therefore criticized for drawing certain conclusions. Sampling the population will show more schooling in younger than in older persons, and higher I. Q.'s with increase of schooling; therefore the many studies which show a gradually decreasing score for older

persons cannot be used to predict what will happen to our present group of younger persons as they grow older. Only longitudinal studies will bring the correct answer. In order to plot the correct curve or decline of intellectual capacity, the same person must be studied from 20 to 80. Since such a study would take 60 years to complete, we can see why we do not have any reports of this character. However, the few interesting studies that have been made suggest that our accepted standard of decline of intellectual capacities is not valid. But all these studies, so far as I know, concern persons of superior intelligence. Therefore this may be what happens only in a selected group and not something that is universal.

One very interesting paper is that of Age and Mental Abilities: A Longitudinal Study, by William A. Owens, Jr., appearing in the Genetic Psychology Monographs for 1953. This study is longitudinal in that 127 men who had been given the Army Alpha form 6 test as an entrance test at Iowa State College in January 1919, had this test repeated 30 years later. The author concludes: (1) There were significant increases in score on the practical judgment, synonym-antonym, disarranged sentences, and information subtests. (2) There was a significant increase in the total Alpha score. (3) There was no significant decrease in score on any subtest. With respect to the effects of the given age increment upon individual differences and trait differences it was noted that trait differences remained remarkably constant, but there were some significant decreases and increases in special subtests.

Bayley and Oden reported recently on the testing of 1,103 adults who were last tested 12 years ago. Of this number, 768 have been followed since their selection in 1921 to 1923 as part of the Terman study of intellectually gifted children, and the other 355 are spouses of these persons. Results of the later test show that the type of intelligence tested by the Concept Mastery Scale has continued to increase through age 50. These tests do not measure speed, nor do they cover the later ages at which real senescent losses in intellectual functions may appear.

The tests show, specifically, that this type of knowledge and ability improves in superior adults from age 20 to age 50; that the improvement, although about equal for all levels of occupation represented, occurs to a greater extent among the middle occupational classes; and that the higher scoring groups show the greater gains on the retest. In both mean scores and gains in scores, the rank order is (1) gifted study men; (2) gifted study women; (3) husbands of subjects; and (4) wives of subjects. The general tendency for increased scores in the most highly intelligent persons is cut off at the top by a ceiling; it is therefore impossible to say whether, with more top, these persons would have gained in score or whether they had already reached their upper limit.

The authors recommend that intellectual changes after 50 should be similarly investigated, and predict "that there will be great individual differences in the age of onset of senescent decline."

From such studies, we may conclude that, leaving out possible decline due to decrease of speed, the measured intelligence of persons of superior intelligence increases rather than decreases from 20 to 50. This great difference in scoring obtained by these longitudinal studies from scoring obtained by sampling the entire population at various

age levels suggests that we may have to revamp our whole concept of what happens in the three decades from 20 to 50. Only when we get further longitudinal studies going beyond the age of 50 will we be in a position to question present findings regarding deterioration after 50.

USE OF QUALIFIED OLDER WORKERS

Although certain facts have been established regarding the intellectual and emotional changes in later life, the great individual differences in personality, rate of brain atrophy, and rate of intellectual decline make it difficult to generalize. We have not yet been able to differentiate clearly the changes that are a part of the normal aging process from those that are the results of specific physiologic, psychologic, and cultural factors. Until we understand this process better, our technics for treatment and for prevention will not develop very far.

Good evidence from longitudinal studies shows that persons of superior intelligence increase in their intellectual capacities until the age of 50; but there is a lack of studies to show what will happen to these same persons after 50.

We are spending large sums of money to retrain the handicapped so that they can be again fully employed, but are doing nothing about our largest group of handicapped individuals—those who are being retired at ages 60 to 70. There is strong evidence that many of these individuals are better fitted for certain types of work than are younger persons. A large percentage of those being retired do not desire it, and such retirement is damaging physically and mentally.

At the present time, the oldest United States Senator is Theodore F. Green, of Rhode Island, who is 88. Senator George, a leading Democratic member of the Senate, is 77. The Congressional Quarterly Almanac for 1954 gave 3 members of the House of Representatives as 79, so that they are now at least 80 years of age. Speaker Sam Rayburn was 74 on January 6, 1956. Members of the United States Supreme Court are considerably younger than at the time when President Roosevelt spoke of "9 old men," but 1 judge is 73 and another is 71. Oliver Wendell Holmes died while still a member of the Supreme Court at the age of 91.

The executive branch of our National Government has never approached the extreme ages recorded in both the legislative and the judicial branches. The oldest age recorded was for Presidents Jackson and Buchanan, each of whom was within a few days of his 70th birthday at the close of his term. It is interesting to note that if Dwight Eisenhower is reelected he will be 70 years, 3 months, and 6 days old when he finishes his second term, thus making him the first President of the United States to reach 70 years of age while in office. There are no legal restrictions against electing a President or Member of Congress or appointing a Federal judge because of old age.

I would like to raise this question: If it is sound policy for industry to retire persons at 65 and for Federal and State Governments to retire employees by at least age 70, how can we justify having no retirement rules for the persons holding the most important positions in the country—in the executive, legislative, and judicial branches of the Government? Here is an inconsistency which might well be investigated. Either a lot of men in industry and Government are

retired earlier than is necessary or desirable, or else a lot of legislators and judges are being kept on too long. The only group of persons who are not subject to retirement, outside of those already mentioned, are certain professional persons and some self-employed persons such as farmers and housewives. It seems probable that premature retirement causes an annual loss of output in industry of over 5 billion dollars. Shyrock estimates that by 1960, if present retirement policy continues, 1,000 economically active persons from 20 to 64 will be supporting between 165 and 169 dependent persons aged 65 or over. According to a recent report, of those who retire from their jobs at 65, over 56 percent are forced to do so and only 9 percent retire because they want the leisure time.

We do not know yet whether the mental disorders in old age, presumably caused by cerebral arteriosclerosis or by senile changes in the brain, are inevitable or whether they can be prevented or at least modified. We do know that there is no satisfactory correlation between severity of mental symptoms and the amount or location of brain changes and arterial changes. We are developing a more optimistic view about treating these mental disorders of old age. Many of them seem to be the reactions of somewhat handicapped persons to situations in life and thus may be open to modification. In other words, they are not explained by the simple changes of old age.

I would, therefore, like to sound an optimistic note and to make a plea for doing more for aging persons, many of whom can be employed with very little effort. Probably at least 10 to 20 percent of those who are being forcibly retired are persons of superior capacities who will perform better than the average. From the standpoint of mental hygiene, I also wish to emphasize the harmful effects of forcing retirement on persons who wish to continue active work and who can contribute something to society by their efforts. From the psychiatric standpoint, the whole field of geriatrics is in its infancy. Much more research is needed, but with our present knowledge it is possible to do a great deal.

The Medical Care of the Debilitated, Hospitalized Aged

Freddy Homburger, M. D., Boston, Mass.[1]

Those physicians who maintain an aggressive therapeutic attitude toward disability in the chronically ill and aged are able to accomplish much with the means at hand. They can rehabilitate many given up as incurable, palliate the discomfort of those who cannot be cured, and uncover many new areas of needed research

The care of the debilitated, hospitalized, elderly patient constitutes one of the most neglected aspects of modern medicine. In the long run, the best attack on the problem would be through preventive geriatrics, which begins quite early in life. This would be the most productive approach and should make the problem easier for the physician of the future. However, the immediate problem is here for us to tackle, and unfortunately little factual information on the subject is available.

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OLD AGE AND CHRONIC ILLNESS

In the first place, gerontologists disagree as to the importance of chronic disease in the aged. Monroe (1), in criticizing a recent book on the care of the aged and chronically ill, objected to the emphasis on chronic illness in the aged. He stated that, "It is improper to equate aging with chronic disease or with invalidism * * *." In his belief, "greater numbers of aging people are much healthier than their predecessors" and "most persons preserve a fairly healthy equilibrium most of the time." Yet, in his monograph on diseases in old age, the same authority propounds that "freedom from disease on the part of old people means, for the most part, undiscovered disease" (2) and that 22 percent of old people [in his series] because of bodily disease, "were unable to maintain their grip on normal personality." Also: "The growing burden upon a hospital imposed by sickness in old age is shown by the fact that, in 1913, 1 in every 16 admissions to this medical service [Peter Bent Brigham Hospital] was an individual over 61, while in 1943, 1 in every 5 admissions was over 61. This is an increase of 200 percent in 30 years * * *."

In part, such confusion arises from the fact that these various discussions deal with different populations. Thus, it may be true that only 5 percent of the population over 65 is institutionalized because of chronic illness. Yet it is equally true that around 20 percent of a population over 65, hospitalized for any number of reasons, has disabling illnesses which alter personalities. Workers in hospitals for the chronically ill seldom encounter any patient over 65 who does not have diseases other than the one primarily responsible for hospitalization, which are partly responsible for his chronic invalidism.

For example, let us look at osteoporosis. In a random survey of the population of a chronic disease hospital (3), 30 percent of the women and 20 percent of the men had radiologic evidence of asymptomatic vertebral fractures from osteoporosis. In Monroe's hospitalized population over 61 (2), 22 cases, or a fraction of 1 percent, had the diagnosis of osteoporosis mentioned, although some of the 17 cases of "osteomalacia" may have been osteoporotic. Likewise, in the entire population of those 65 and over, diagnosis of osteoporosis is seldom made. In my opinion, it is far more often overlooked even when present. It has been claimed that demineralization of bones in persons over 60 years is frequently reported by roentgenologists, but that its relation to disease or malnutrition or the menopause or indeed to any symptoms is infrequent (1). In part, such statements are contradictory, since demineralization of bone in women after 60 would by definition be related to menopause, although not necessarily in a cause and effect relationship.

All too many women are told they must put up with aches and pains when a simple hormonal regimen could make them far more comfortable. The pains and complaints from osteoporosis may be present long before demineralization of bone becomes visible on X-ray examination (4), and only a therapeutic trial with bone anabolic androgens, estrogens, or both can reveal the true nature of the disorder.

TABLE 1.—*Necropsy findings compared with clinical discharge diagnoses in 73 patients over 65* [1]

Diagnoses	Number of times made by clinicians at time of death	Number of times found by pathologist at necropsy
Pulmonary infections	19	54
Cancer	64	53
Urinary infections	8	33
Cardiovascular disease	17	24
Cholecystitis	0	11
Cerebrovascular accidents	9	5
Hepatic disease	0	2
Intestinal obstruction	1	1
Gastric ulcer	1	1

[1] Note the discrepancies, especially with respect to urinary and pulmonary infections, which often escape the attention of the clinicians.

LACK OF EXACT INFORMATION

All of this merely demonstrates that we do not know the exact incidence of some of the common disabilities of the aged. Our own experience leads us to agree with Kretchmer (5) that "the problem of caring for the chronically ill patient is intimately associated with the care of the aged and aging."

In practice, it is difficult or impossible to know exactly which diseases and complications of diseases exist in our aged and debilitated hospital population. With advancing age, there are encountered an increasing number of pathologic changes, most of which are hard to detect. This is borne out by our experience comparing discharge diagnoses in 73 patients over 65 with the necropsy diagnoses, as shown in table 1. The extensive and thorough studies of Mueller-Deham (6, 7) further support his conclusion that "morbidity and mortality statistics are unsatisfactory for the higher age groups. Deaths from cardiovascular disease are overestimated; those due to infections are underestimated. Reliable data can be based only on autopsy findings."

MODERN NEGLECT

It is generally unrecognized and seldom admitted that in most hospitals for the aged and chronically ill there are not enough physicians to investigate all patients as thoroughly as should be done, that our medical information on our charges is rudimentary, and that the validity of the observations recorded on the patients' charts is largely illusory. There are many so-called hospitals for the chronically ill which have no full-time physicians or, in the more fortunate cases, have only a rudimentary house staff. The members of the visiting staff breeze in and out, taking care of emergencies as best they can. Only a few exceptional institutions concentrating on the care of the chronically ill have teaching or research affiliations with medical schools. More often than not, these are purely nominal, and, where they are real, the benefits of such associations trickle down to only a fraction of the inmates since the research and teaching staffs can obviously not take care of everybody. If the medical picture is glum for the chronic disease hospital, it is far blacker for the many nursing homes, almshouses, and convalescent homes.

This problem is not confined to the United States but is worldwide. In 1947, Howell wrote of the situation in England:

> In this country there are thousands of people who have been doomed to imprisonment for life. They have committed no crime, yet there is no one to whom they can appeal against their sentence. Why? Because it was pronounced by a doctor, and not by a judge in his court. These prisoners are known as the chronic sick. Some are imprisoned in their own homes, whilst others may be found in the "chronic" hospitals, whose gates might aptly be emblazoned with the motto: "Abandon hope, all ye who enter here." How often is this confinement necessary? Why do medical men adopt this attitude of therapeutic despair? (8)

DEFEATIST ATTITUDE AND THERAPEUTIC IMPOTENCY

Whether we like it or not, at the very time that medicine makes tremendous strides in other fields, we treat many of our disabled aged not much better and perhaps less charitably than the Eskimo who exposes the debilitated toothless ancestor on the polar ice to die. (9)

The reason for this defeatist attitude is that in the past we were quite unable to do anything about most of the ills of the aged and this brought forth professional pessimism, which has persisted long after the cause for pessimism has disappeared.

There is such a thing as unwarranted therapeutic enthusiasm, but there can also be unjustifiable procrastination for the sake of primum non nocere—in effect, doing harm through inertia and through fear of undesirable side effects. If we were always as cautious as some wish us to be, we would not use many lifesaving drugs, for fear that they might be dangerous. This goes for insulin, all synthetic hormones, many antibiotics, glucosides, alkaloids, vaccines, and sulfa drugs (10).

It used to lack glamour to care for most diseases common in the aged, for little could be done that was of more than palliative value. As an example, let us consider the management of hypertension, a common disorder in people over 60. More than half of such a population will show blood pressure readings above 140 millimeters hemoglobin systolic and 90 millimeters hemoglobin diastolic. With increasing age, the incidence of such levels also increases and what is often called hypertension may actually be the normal pressure at these ages. But when we consider those with unquestionably pathologic hypertension what complete therapeutic impotence prevailed in this disease as late as 5 years ago, when Monroe wrote:

> Hypertension cannot be treated directly in old people. Whatever the merits of sympathectomy, all physicians agree that it is not advisable for persons over 61. Restriction of salt has long been proved useless. The rice diet is one that is dangerously low in protein; it cannot be tolerated by old people, who are very susceptible to malnutrition and to demineralization of bone. The habit of prescribing small doses of sedatives daily is to be condemned. They do not reduce the blood pressure, and they almost invariably depress the oldster. He is already alarmed by his age and by the

> disabilities that threaten his competence and security. Sedatives cast a chemical cloud of confusion over his performance, making it still more difficult to command his situation; his fatigue, agitation, and blood pressure increase. The best treatment is to prescribe adequate rest, to insist upon reasonable exercise, particularly some relaxing sport such as bowling or dancing, to praise a diet that is normal in every respect, and then to search imaginatively for the solution of, or adjustment to, the psychic or somatic difficulties that are surely present (2).

NEW DRUGS AND NEW THERAPY

Although we may take exception to some of these statements, they nevertheless reflect the attitude of some physicians as recently as 5 years ago. Then, what was there to stimulate the mind of a curious medical student bent on doing something for his hypertensive patients? What could one honestly say to afflicted patients without admitting the inability to alter the course of their disease? And why should a man about to choose his life's career become involved in such a hopeless proposition? Then suddenly, drugs were found which, for the first time, make it possible to control hypertension (11). Some of these drugs are not without danger, but others appear, less toxic, more effective.

Now, for the first time, we perceive a dent in the armor of this disease. Not only has it become possible to treat more effectively patients with various types of hypertension but the problem can be studied from a new angle. Meanwhile, fundamental information on atheromatosis, one of the major causes of hypertension, is accumulating (12). Gofman's studies on lipoproteins, Barr's work on the estrogenic effects upon serum lipids (12), Lever's observations on changes in serum cholesterol following injections of Stare's fat emulsions (13), all foreshadow a pattern of information from which may spring the eventual solution of this problem of degenerative vascular disease.

This should call forth great enthusiasm and interest in the therapy of hypertension and arteriosclerosis. It should cause clinical investigators to turn their attention toward the hospitals for the aged and chronically ill where the ideal clinical material for such studies resides. It should awaken the medical schools from their lethargy with respect to such institutions, for there can be found opportunities for teaching and research in this new field.

WHAT ARE TODAY'S PROBLEMS?

While such advances are taking place, medicine will no doubt change its thinking regarding the care of the hospitalized, debilitated aged. The staffs of our institutions will improve and more adequate research facilities will be created. Meanwhile we must from day to day face up to our problems and try to do what we can with the means at hand.

Disease incidence in a general hospital population

Monroe's tabulation of diseases in an over-60 hospital population (2) gives an idea of the general medical situation to be expected in such a population.

First, there was a general decline with age of visual and auditory acuity. Twenty-six percent of the patients from 61 to 65 had impaired hearing. Only 20 percent of those up to 65 and only 10 percent of those over 80 retained good teeth. One-third of the men and one-half of the women were edentulous.

Less than half of the patients, 41 percent, were considered normal mentally. Twenty-two percent had mental deterioration from illness outside of the central nervous system; 15.4 percent had cerebral arteriosclerosis; and 2.6 percent had senile dementia. The other mental illnesses included psychoneuroses, reactive depressions, and psychoses. Hemiplegias occurred in 6 percent and minor, transitory palsies were found in about the same number. About 1 in 100 patients had paralysis agitans. As stated before, hypertension was very common. Heart disease was found even more frequently, with only 44.6 percent of the patients clinically free of it and about one-half of these showing cardiac pathology at autopsy. More than 10 percent of the patients had coronary occlusions. Diseases of the respiratory tract were of minor importance.

Tuberculosis was present in less than 5 percent. Miliary tuberculosis was a cause of death in 22 patients. Gastrointestinal diseases were relatively frequent. Peptic ulcers were found in 8.7 percent of men and 4.4 percent of women. There were 16 cases of cancer of the stomach. Hemorrhage was a complication in one-third of patients with peptic ulcers. Obstruction occurred in 12 percent of patients and perforation in 6 percent. Gallstones were found in 7.1 percent of men and in 18.5 percent of women. However, only about 15 percent of patients with cholelithiasis experienced symptoms referable to their stones. Cirrhosis of the liver was found in less than 2 percent. Diverticula were found in about 4 percent, mostly in the colon. "Nervous indigestion" was present in about the same number.

Fifteen percent of the men and 2 percent of the women had hernias. Pyelonephritis was found in about 3 percent and cystitis in 4 percent. Urinary calculi were present in slightly less than 1 percent. Nearly one-half of the men had hypertrophy of the prostate and nearly 3 percent had prostatic cancer. Of the women, 4.4 percent had relaxed pelvic floors.

Pernicious anemia occurred in over 4 percent and secondary hypochromic anemia in 13 percent. Diabetes mellitus was present in about 10 percent. Syphilis was found in about 5 percent. Malnutrition, as judged by weight below normal standards, occurred in 30 percent of the men and 20 percent of the women.

Nearly all patients had hypertrophic arthritic changes and about 1 percent had malum coxae senilis. Atrophic arthritis occurred in about 2 percent and gout in 0.5 percent of the men. Osteitis deformans was found in about 1 percent and osteoporosis in one-third of 1 percent.

Cancer was present in 14 percent, but autopsy incidence of cancer was nearly twice that high—24.8 percent. Anemia of these cancer patients was mostly due to blood loss.

This, in summary, is the medical picture for patients over 60 who, for one reason or another, are admitted to the medical service of a general hospital. The picture in a chronic disease hospital is a vastly different one and the incidence of various diseases among the presumably healthy general population over 60 is still another matter.

Incidence of disease in a hospital for chronic illness

In a survey made in England on 788 hospitalized patients with chronic disease, Affleck (14) noted chronic sickness in 22.4 percent of men and in 19.4 percent of women under 65, as compared with 77.6 percent of men and 81.8 percent of women past 65. Their functional disabilities in decreasing order of frequency were difficulties of locomotion, 663 patients; incontinence of urine, feces, or both, 188 patients; poor hearing, 108; difficulties of speech, 85; difficulties in feeding themselves, 70; blindness or poor sight, 69; and convulsions, 36 patients.

Our own experience is illustrated in table 2. This is a listing of the major admission diagnoses made on 286 patients over 65 during 1955.

TABLE 2.—*Admission diagnoses of patients over 65 admitted to the Holy Ghost Hospital, Cambridge, Mass., during 1955 (400 admission diagnoses in 286 patients)*

Cancer	162
Cardiovascular disease	86
Hemiplegias	39
Neurologic disease	47
Fractures	19
Arthritis	12
Diabetes	10
Miscellaneous	25

In the chronic disease hospital, the patient's general condition is far poorer than in the Brigham Hospital series. In part, this is because of the different age distribution, which in the chronic disease hospital is skewed toward the higher age brackets. In part, it is the result of a prevalence of more advanced disease among such patients. Thus, the cancer group accounts for a much higher proportion of these patients. Their neoplastic disease is usually far advanced, and, surprisingly, cancer patients in the chronic disease hospital, because of earlier death, have a shorter average length of hospitalization (93 days) than do patients with other diseases (2½ years). Their anemia, which complicates more than half of these cases, is predominantly of a myelotoxic type and blood loss anemias are rare as are hemolytic anemias (15).

Osteoporosis is a prevalent disease, confirmed by clear-cut X-ray studies in about one-third of the cases and probably present in nearly all subjects, as are degenerative joint changes; but, as may be seen from tables 1 and 2, these conditions are rarely mentioned in the records.

While specific vitamin deficiencies are rare, general malnutrition is common. This is evidenced not only by subnormal body weights but also by hypoproteinemia and especially hypoalbuminemia, as shown by our studies on electrophoretic plasma protein patterns in about 2,000 patients. Hypoalbuminemia was not correlated with age, sex, or any particular diseases but was more severe in all bedridden patients than in those who were even partly ambulatory. It was especially pronounced among the inmates of a Jewish hospital where kosher meats were used. Meat prepared according to these orthodox rites has a higher water content and therefore less protein than meat obtained from nonkosher sources. If the patients are given presumably adequate amounts of proteins as calculated from conventional food charts, they actually receive a diet low in proteins.

Peripheral vascular disease is very common and is often complicated by diabetes. Hemiplegias are frequent and, next to cancer, one of the most serious problems.

Urinary infections, incontinence, and prostatism are extremely prevalent among the men. Although many of the urinary infections are latent, they flare up quickly at the slightest aggravation of the general condition. Completely normal urine sediments are rarely seen. Gastrointestinal disorders are common. The more serious of these are the intestinal obstructions which often terminate the development of gastrointestinal cancers. Far more frequent, however, are irregularities of bowel function, since most bedridden patients are constipated and suffer from fecal impactions if not properly cared for, and others are incontinent of feces for various reasons. Minor epidemics of diarrhea occur frequently, despite attention to food hygiene and special preventive measures.

The fact that such outbreaks are limited to the inmates and do not affect the hospital personnel seems to indicate that the elderly debilitated are more susceptible to enteritides than are their healthy and younger attendants. Disorders of the skin complicate the course of many chronic illnesses. These range from minor rashes to the development of large intractable bedsores and decubital ulcers in areas exposed to pressure. Even the most attentive preventive nursing care cannot eliminate bedsores. It is an unexplained phenomenon that some patients who are bedridden for long periods never develop this complication, while others, whose nutritional status and general condition appear no different and who receive identical nursing attention, will suddenly develop decubital ulcers after shorter periods. The physiologic pathology of the skin in the debilitated aged is obviously poorly understood and would be a fruitful subject for intensive study.

Table 3 shows the complications as they existed this week in 149 of our patients over 65.

MENTAL ILLNESS IN A CHRONIC DISEASE HOSPITAL

The mental picture of the inmates of the chronic disease hospital is poor. There are, of course, many cases of varying degrees of senility, although frank psychoses are rare since psychotic patients are not admitted. Personality evaluations performed by the Rorschach technic [1] on 79 of our most alert patients showed 9 classified as normal; 42 as presenile, including 22 deteriorated; 24 as senile; with 4 listed as uncooperative.

Few of our inmates are in a well-adjusted, serene mood and many are apprehensive about their condition, restless, and cranky, while others are depressed, apathetic, and pessimistic. Many are suspicious, resentful of the lack of attention on the part of their families, and generally unhappy. This is the general medical picture that confronts those of us who are taking care of chronically ill, debilitated aged. What can be done to help them live out their life span in relative physical comfort and mental equilibrium?

[1] The Rorschach tests were performed and interpreted by Dr. L. B. Ames, research director of the Gesell Institute for Child Development, New Haven, Conn., who has described her experience with this personality evaluation in the aged in the book, Rorschach Responses in Old Age (16).

CONSTRUCTIVE THERAPY FOR THE DEBILITATED, HOSPITALIZED AGED

Some of the ways and means for coping with these problems are discussed at length in my book, on The Medical Care of the Aged and Chronically Ill (17), and I should like merely to review some of the seemingly minor but very important therapeutic measures that may be of help.

TABLE 3.—*Complications in 149 patients over 65 at the Holy Ghost Hospital, Cambridge, Mass., Jan. 10, 1956*

Insomnia	46
Fecal impaction	36
Respiratory infection	29
Urinary infection	26
Foot problems	24
Urinary catheterization	23
Denture problems	21
Bedsores	7

Selection of patients

First of all, patients should be carefully selected for admission to a chronic disease hospital, care being taken not to admit frankly psychotic patients who belong in mental institutions. However, it is equally important not to refuse admission to patients who may be temporarily mentally deranged because of their poor general condition, which may be improved with appropriate care (18).

The worst sin, which is committed every day in many nursing homes and hospitals, is to consider some of the extremely debilitated individuals as purely "terminal care" problems or subjects for "custodial" care. A few years ago, these were perfectly justifiable terms applicable, for instance, to the malnourished hemiplegic who ended up at the chronic disease hospital after months in bed at home, perhaps arriving semicomatose, with bronchopneumonia and with bedsores. The majority of such patients died after a few days of "terminal" care and those who survived miraculously, remained hospitalized custodial cases for the rest of their lives.

New approach in therapeutic management

Today we accept such patients for aggressive management and rehabilitation. They must usually be cleaned; their hydration and electrolyte balance is restored to normal by appropriate measures and under laboratory control; infections are treated vigorously; and the nutritional status is evaluated and corrected by dietary measures, transfusions, protein supplements, and so on. The mental and physical status is then evaluated and rehabilitation, physiotherapy, and occupational therapy are instituted as soon as possible. The majority of these patients leave the hospital after a few months, come back regularly to continue their conditioning exercises, and some have even returned to gainful work. This type of result can also be obtained in many arthritic patients, even in those whom more conservative institutions have declared hopelessly crippled. By a skillful combination of hormonal therapy, local infiltration of joints and tendons with hydrocortisone, physiotherapy, and rehabilitative training, many of these abandoned prisoners of their joints are freed and restored to useful lives.

Terminal or custodial care—indeed.

The terms should be abolished or reserved strictly for those who cannot be helped by any means available in the modern medical armamentarium. Unfortunately, the physicians who attend the vast majority of these patients when they are first stricken do not seem to be aware of the benefits that can result from modern rehabilitation. They consider them to be candidates for custodial care and do not realize the efforts being made by the more progressive chronic disease hospitals for the rehabilitation of these patients.

New concept of rehabilitation

Those patients who cannot be restored to any degree of independent physical activity must be made as comfortable as possible. This not only requires attention to the technical details of nursing care, but it demands that any medical condition that can be corrected be treated effectively and adequately.

Even though a patient with a metastasizing cancer may die within a short time, this does not justify therapeutic nihilism if he suffers from a urinary infection which causes pain, tenesmus, chills, and fever. Such a patient must receive competent treatment, with antibiotics, sulfa drugs, mandelic acid, or whatever is indicated. He may have to be placed on constant drainage and, when this is necessary, only the best available closed drainage system is good enough and will prevent superinfection. If there is trouble from a neurogenic bladder, tidal drainage should be used.

Patients with gastrointestinal difficulties must be thoroughly investigated, regardless of the hopelessness of their general condition. Sometimes a vicious circle of one condition aggravating the other may be broken by curing the minor ailment.

There is no excuse for permitting a patient to be plagued by continuous nausea and vomiting. If there is a mechanical obstruction, it may be relieved by surgery or palliated by appropriate intubation to relieve the pressure. If the nausea is of central nervous system origin, a number of drugs should be tried to relieve it.

Some of the difficulties of chronically ill patients may be iatrogenic, brought about by extended therapy. Electrolyte disturbances in the wake of hormone therapy, such as hypokalemia with adrenal or adrenotropic hormones or hypercalcemia with androgenic therapy, must be recognized and corrected.

Sodium chloride losses caused by excessive sweating or by the loss of hydrochloric acid during prolonged gastric aspiration also require corrective measures.

Malnutrition is one of the most difficult problems encountered in the chronically ill. Sometimes senile dementia is its root, at other times loneliness or neglect by the family. Dietary fears and fads result in malnutrition. We have found that many cancer patients admitted to the Holy Ghost Hospital gain weight during the first few weeks of hospitalization. This may be explained by a variety of factors. The nurses are solicitous and attentive to dietary wishes; the food is good and served in an appetizing way; and the surroundings are pleasant. Spiritual needs are catered to; pains and discomforts are skillfully palliated. All of these factors contribute toward better nutrition and are effective enough to bring about temporary weight gains even in the stubborn malnutrition of neoplastic disease.

Sometimes physical defects lead to malnutrition. Most often overlooked are poor teeth, lack or deficiencies of dentures, deficiencies of digestive functions, or simply lack of appetite. There are a great many simple measures which may aid in overcoming these difficulties. Good dental care should be provided. Small doses of insulin sometimes stimulate appetite; a little hydrochloric acid and certain digestive-enzyme preparations may be effective. In depressed patients, small doses of benzedrine or meratran may help and, in certain situations, the appetite-stimulating effects of cortisone are useful. Protein anabolic hormones—androgens, estrogens, or both—may improve the nutritional status and, in the hypothyroid aged, thyroid may improve appetite and bowel function.

Mental outlook

The mental outlook of the debilitated aged is important for the patient, for his family, and for the prevailing hospital atmosphere. We can hardly expect these tortured patients to be cheerful. Yet, a great deal can be done to help them to adjust to their plight. It is often said that one must care for the patient as a whole and not merely consider him as the carrier of a disease. In these cases, the contrary is sometimes true. One may improve the patients with chronic disease as a whole by treating all their infirmities. Regardless of the course of their major disease, patients will become worse mentally if trivial matters are allowed to annoy them. If they are wet because of incontinence; if they itch with skin irritations; if they are wretched with nausea, uncomfortable with constipation, tired from sleepless nights; if they are worried from minor aches and pains of joint disease or unrecognized osteoporosis; if their food lies heavily on their stomachs; or if they are dizzy from hypertension, how can they be reasonably well adjusted, no matter what is done for the psyche? It is wrong to give useless pills and to ignore the patient's anxieties and conflicts. Yet, it is equally wrong to concentrate on psychiatric advice and therapy and to overlook the minor physical deficiencies, the sum of which may render a person most wretched and miserable.

The physician who cares for such patients must keep in mind the multiplicity of their diseases and take care of all of them as they arise. Better than that, he must anticipate some of these and attempt to prevent them.

Psychotherapy

When all this has been done, we may then go to work with psychotherapy. In this we are aided by those fascinating agents, many of them new, which influence the moods and emotions—the sedatives, the stimulants, the tranquilizers. Much of this therapy is still in an experimental stage, yet it is already clear that some of these agents are useful tools in the care of the chronically ill and the debilitated aged.

CONCLUSIONS

At the present time, we do not know with any degree of statistical accuracy which disorders to expect among our aged patients. Except for cardiovascular disease and mental deterioration which occur in nearly all those who live long enough, the pathologic picture varies greatly with the type of population studied. This ignorance of the basic pathology of old age renders difficult the practice of preventive geriatrics.

Therapeutic geriatrics is hampered by a pessimistic attitude and exaggerated cautiousness based on the therapeutic impotence of the past. This attitude delays the application of medical discoveries to the aged who are chronically ill. It causes the care of the aged to be considered an uninteresting field which is shunned by the new generation of physicians and neglected by the medical schools. It accounts for the poor quality of medicine in some of our chronic disease hospitals.

Those who oppose this professional skepticism and advocate an aggressive therapeutic attitude toward the chronically ill and aged are able to accomplish much with the means at hand. They can rehabilitate many who have been given up as incurable and palliate the discomforts of those who cannot be cured. In the course of their work, they can uncover many areas for new researches that need to be conducted. While they may be looked upon by some conventional minds as working on the fringes of medicine, they are in reality pioneering on the very frontiers of our art.—From the cancer research and cancer control unit, department of surgery, Tufts University School of Medicine, and the Cancer Research Laboratories of the Holy Ghost Hospital, Cambridge, Mass.

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SECTION D. CHRONIC ILLNESS

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18. A REVIEW OF ILLNESS FROM CHRONIC DISEASE AND ITS VARIATION WITH AGE, SEX, AND SEASON, WITH SOME TRENDS [1]

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INTRODUCTION

Although the death rate from all causes in the United States has been decreasing for many years, the mortality from some of the most important chronic killers has continued to rise. Among the latter are heart diseases, particularly the arteriosclerotic type, malignant neoplasm, and even a few diseases such as diabetes mellitus for which good control methods are available.

On the other hand, some of the less frequent chronic and related diseases are largely or partially under control by prevention or the use of antibiotics and other drugs to avoid serious outcome such as permanent impairment or death. But in general the noninfectious chronic diseases have yielded more slowly to control measures than the many infectious diseases such as tuberculosis, syphilis, the common diseases of childhood, pneumonia, typhoid, typhus, and others.

The important development of antibiotics and new drugs, and the marked improvement in the general level of living in the past half century, have accelerated the downward trend of the death rates from both acute and chronic infections and some other diseases, but have not yet succeeded in suppressing the great noninfectious chronic degenerative diseases. However, sufficient progress has been made in the control of many serious chronic diseases to change the attitude of researchers from despair to hope (1). ACTH and cortisone have been useful in rheumatoid arthritis and a considerable number of other diseases. Here, as in other newly developed drugs, there have been minor and sometimes serious side effects in the early use of the new therapeutic agents. A great many other developments in the various "wonder drugs" have taken place; the intention here is merely to indicate that their application to the infectious diseases has thus far been more successful than in the field of the noninfectious diseases.

CHARACTERISTICS OF THE TOTAL CASELOAD OF CHRONIC AND ACUTE ILLNESS

In the study of almost any type of data that may be undertaken, there are few persons so familiar with the subject that they can assess the magnitude, important characteristics, or other important statistical aspects of the problem without some related data for comparative or control purposes as a measuring rod to apply to the data under primary consideration.

In a study of the extent of chronic illness in the population and the characteristics of the chronic patients, some comparison with acute

[1] From: Journal of Chronic Diseases, vol. 1 (April 1955), pp. 412–441.

illness seems to be a necessary and logical step. In this study, comparisons of chronic and acute illness of various kinds will be made from data by diagnosis, age, sex, and severity of the case, collected mainly in five periodic household canvasses. The 5 surveys covered more than 80,000 full-time person-years of observation.

In the matter of severity, the total illnesses are classified as: (*a*) Nondisabling cases, including those which caused no loss of time from usual activities; (*b*) disabling cases, which refer to those which involved one or more days lost from work away from home or at home, including housekeeping, school, or other usual activities. Bed cases constitute a subgroup of disabling cases and include those patients confined to bed at home for 1 or more days or in a hospital for 1 or more nights, or both. Thus the total cases amount to the sum of the nondisabling and disabling; all bed cases include hospital cases, and all disabling cases include those patients in bed at home or in a hospital or both.

These 5 surveys included 38,544 person-years of observation for a group of families in 18 States who were observed 1 full 12-month period; 4,236 person-years for families in 18 States observed less than 12 months; Cattaraugus County, N. Y., with 10,142 person-years; Syracuse, N. Y., with 6,341 person-years; and the 5-year Baltimore Eastern Health District illness study with 21,505 person-years of observation. The latter three surveys were somewhat more intensive with special reference to chronic disease; an inventory of all persons with any chronic disease (nondisabling or disabling) was made at the beginning of these studies, and other persons with chronic diseases, both new and those missed in the first inventory, were added as of the date of entrance into the study or as of the onset of the illness if it was a new case. Because of this more intensive effort to record all chronic cases, and because days of disability and days in bed were not available by age and sex for all 5 surveys, some of the data on chronic diseases will be confined to these 3 surveys.

The annual total case rate in the 5 surveys was 1,060 per 1,000 canvassed population or just over one illness per year per person. However, in the 3 most intensive surveys, the total annual case rate was 1,289 per 1,000 population, of which in 615 cases per 1,000, or 48 percent of all recorded cases, the patient was disabled for 1 or more days; in 369 cases per 1,000 population, or 29 percent of all cases, the patient was confined to bed for 1 or more days; and in 56 cases per 1,000 population, or 4.4 percent of all cases, the patient was confined to a hospital for 1 night or longer.

Of the annual total of 1,289 recorded cases per 1,000 population in the 3 surveys, 170 per 1,000 population, or 13 percent of all cases, were chronic, and the other 1,119 per 1,000 population, or 87 percent of the total, were acute. The proportions of all chronic and of all acute cases that were disabling were 57 and 46 percent, respectively; of the chronic disabling cases, 66 percent of patients were in bed for 1 or more days, as compared with 59 percent of those with acute cases. Of the disabling days in chronic disabling cases, 35 percent were spent in bed (at home or in a hospital), as compared with 33 percent of days in acute cases. Of the patients with chronic disabling cases 18 percent were hospitalized and spent 22 percent of their days of disability in a hospital, as compared with 7.4 and 7.9 percent, respectively, for acute cases. Finally, of the patients with chronic bed cases 28 percent were

hospitalized and spent 64 percent of their bed days in a hospital, as compared with 13 and 24 percent, respectively, for acute cases.

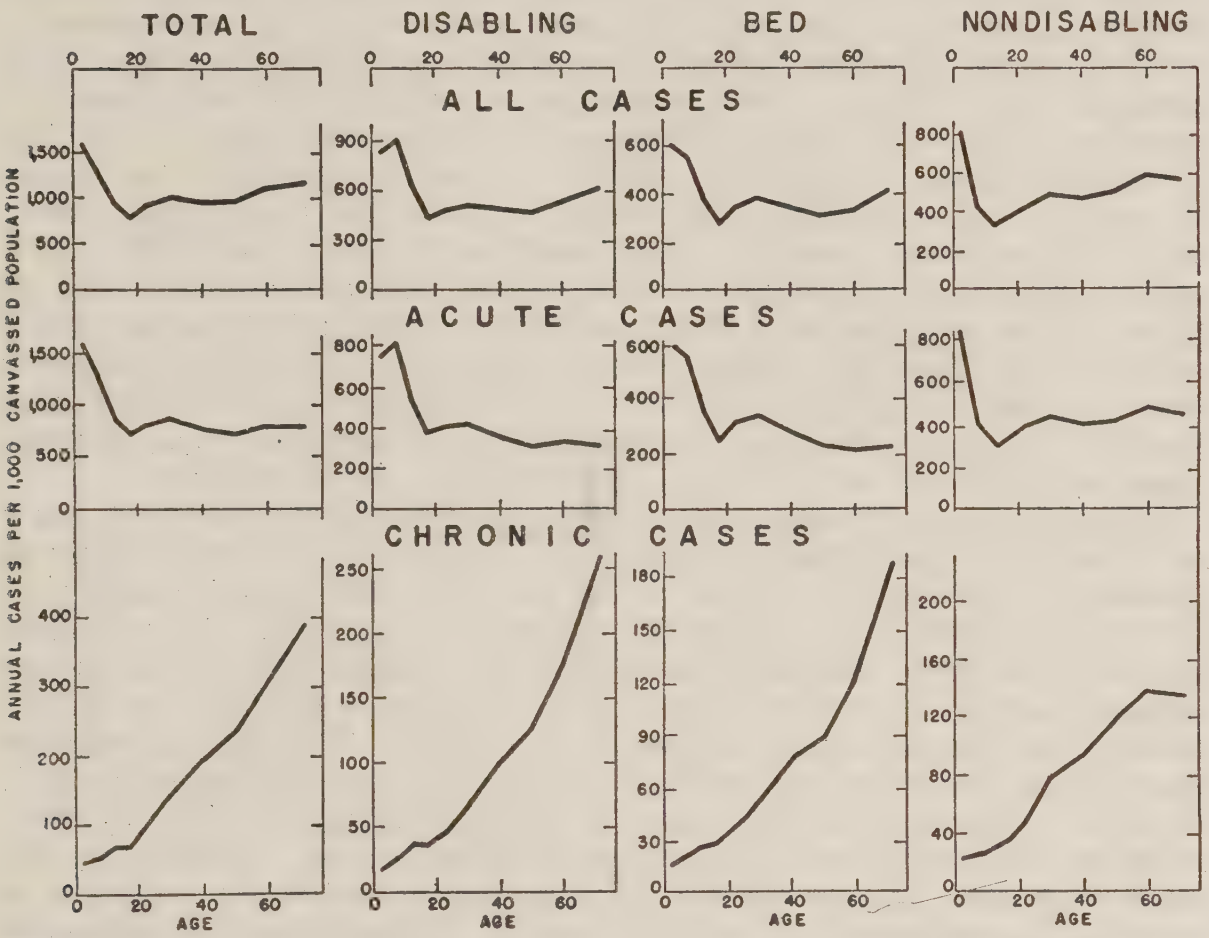


FIGURE 1.—Annual age-specific case rates for all and for 3 severities of acute and chronic illness per 1,000 canvassed population—5 surveys with 80,768 full-time person-years of observation.

As a preliminary step in an examination of age distribution, it seems worth while to compute certain statistical measures or rates for the group of chronic diseases as a whole and to compute corresponding rates for the group of acute diseases. Figure 1 is based on the five studies of illness (2). It is seen in this figure that the case rates for the two broad types of illness vary with age in entirely different ways; acute disabling and bed cases have their highest rates in childhood but after a low point around 15 to 20 years, with a slight rise thereafter, the acute case rates tend to decline or remain approximately constant from roughly 30 to 75 years of age.

In contrast, chronic case rates rise rapidly with age, particularly disabling and bed cases. Nondisabling chronic case rates do not rise as rapidly as those of the more severe types and actually cease to rise in the oldest ages, presumably because many nondisabling chronic cases in the earlier ages tend to become disabling in the older ages. The slower rise with age in nondisabling chronic cases in the older ages is reflected also in the total of all severities of chronic cases.

In the study of illness in the general population which was mentioned previously, (2) 103 rather specific diagnoses emerged with enough cases for statistical analysis. Of these 103 diagnoses, 33 (32 percent) were composed of cases the great majority of which were chronic in nature. The other 70 diagnoses (68 percent) were predominantly acute.

In the 3 surveys the total disabling days for chronic diseases amounted to 7,126 per 1,000 canvassed population, of which 2,459 or 35 percent were bed days, and 1,562 per 1,000 population or 22 percent of all chronic disabling days were hospital days. Comparative rates for acute diseases indicate that the total acute disabling days amounted to 5,166 per 1,000 population, of which 1,719 or 33 percent were bed days, and 410 or 7.9 percent were hospital days. Thus the 97 chronic disabling cases per 1,000 canvassed population produced 38 percent more disabling days than the 518 acute disabling cases; the 64 chronic bed cases per 1,000 canvassed population produced 43 percent more bed days than the 305 acute bed cases; finally the 18 chronic hospital cases per 1,000 population produced 281 percent more hospital days than the 38 acute hospital cases. To look at the matter from another viewpoint, the mean days of disability per acute case was 10.0, of bed was 5.6 days, and of hospital care 10.6 days, as compared with 73, 39, and 88 days, respectively, per chronic case.

Figure 1 shows, for the five surveys, case rates by age for both sexes combined. Figures 2 and 3 show, by sex and age, rates for days of disability and days in bed as well as cases for the same 2 categories, for the 3 surveys where special attention was given to complete recording of facts about chronic disease. Although the rates are higher, they are here plotted on scales to compare relative age curves rather than the absolute heights of the rates. Thus the curves for cases, both disabling and bed, are similar to those shown in figure 1. However, the total and the chronic days of disability (fig. 2) both increase with age more rapidly than the case curves. Moreover, this rapid increase with age for days of disability is not so true of days in bed (fig. 3), particularly for chronic cases. Presumably this difference reflects the medical practice of not ordering aged patients to bed for long periods if they are able to be up and about.

As to sex differences, the case rates, both acute and chronic, are usually higher for adult women than for men of the same ages, but the differences are considerably less when the female genital and puerperal conditions are excluded. For the chronic cases the excesses in the rates for women are considerably greater in terms of cases than of days of disability or days in bed.

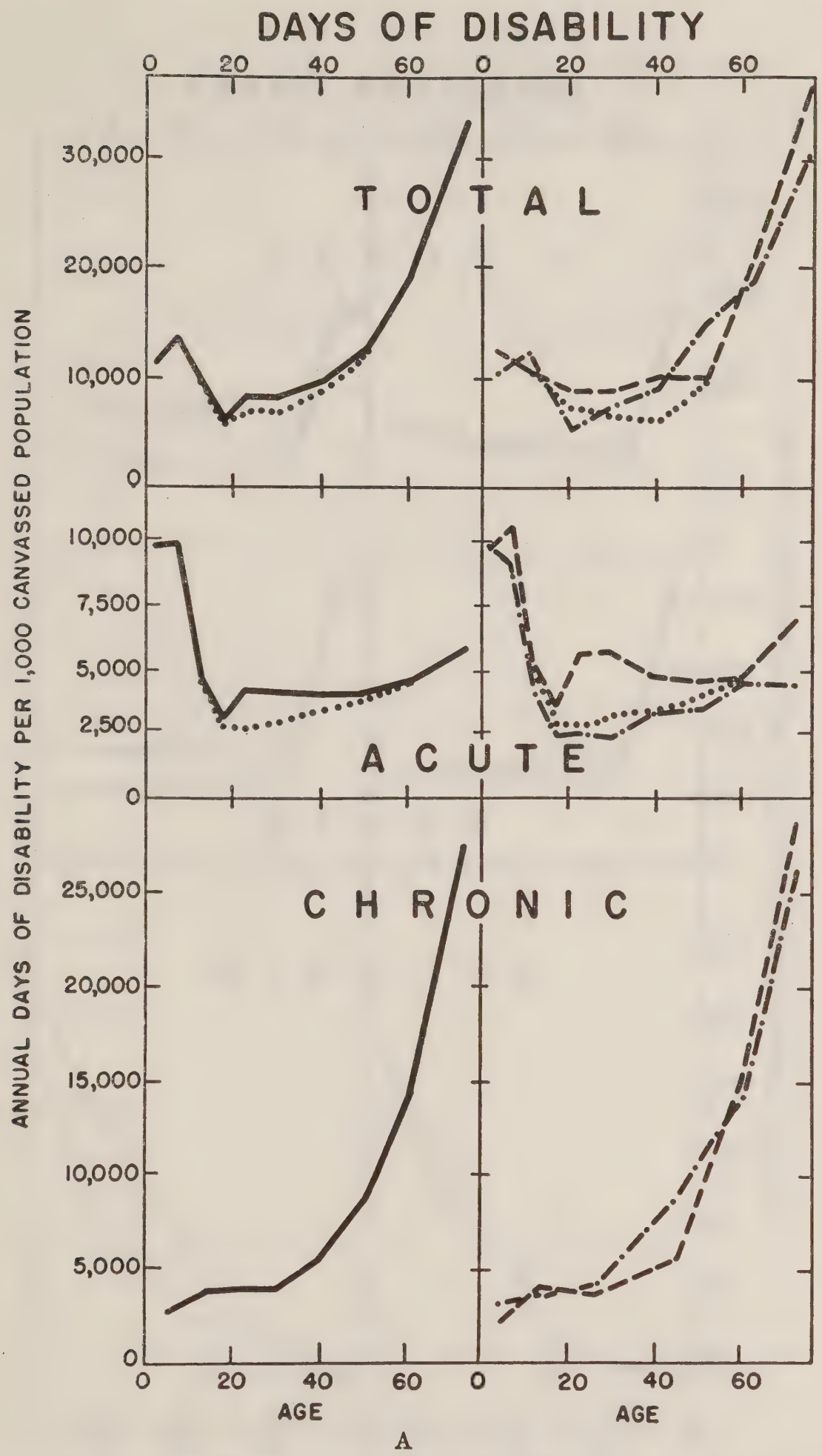
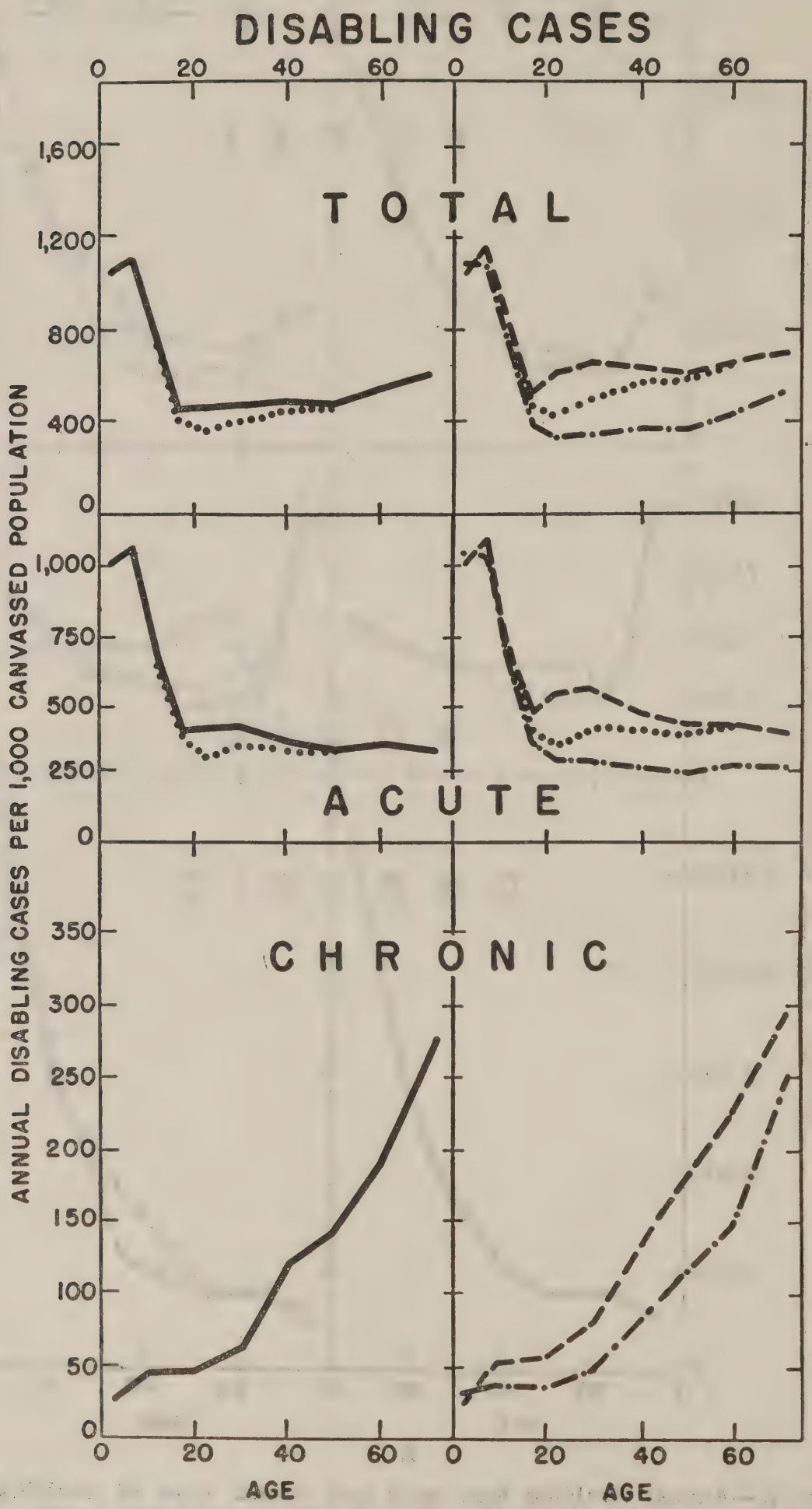


FIGURE 2.—Annual disabling case rates and annual days of disability per 1,000 persons under observation, by age and sex—3 surveys with 37,988 full-time person-years of observation (Baltimore, Md., Syracuse and Cattaraugus County, N. Y.).


DISABLING CASES
TOTAL
ACUTE
CHRONIC
ANNUAL DISABLING CASES PER 1,000 CANVASSED POPULATION
AGE
AGE

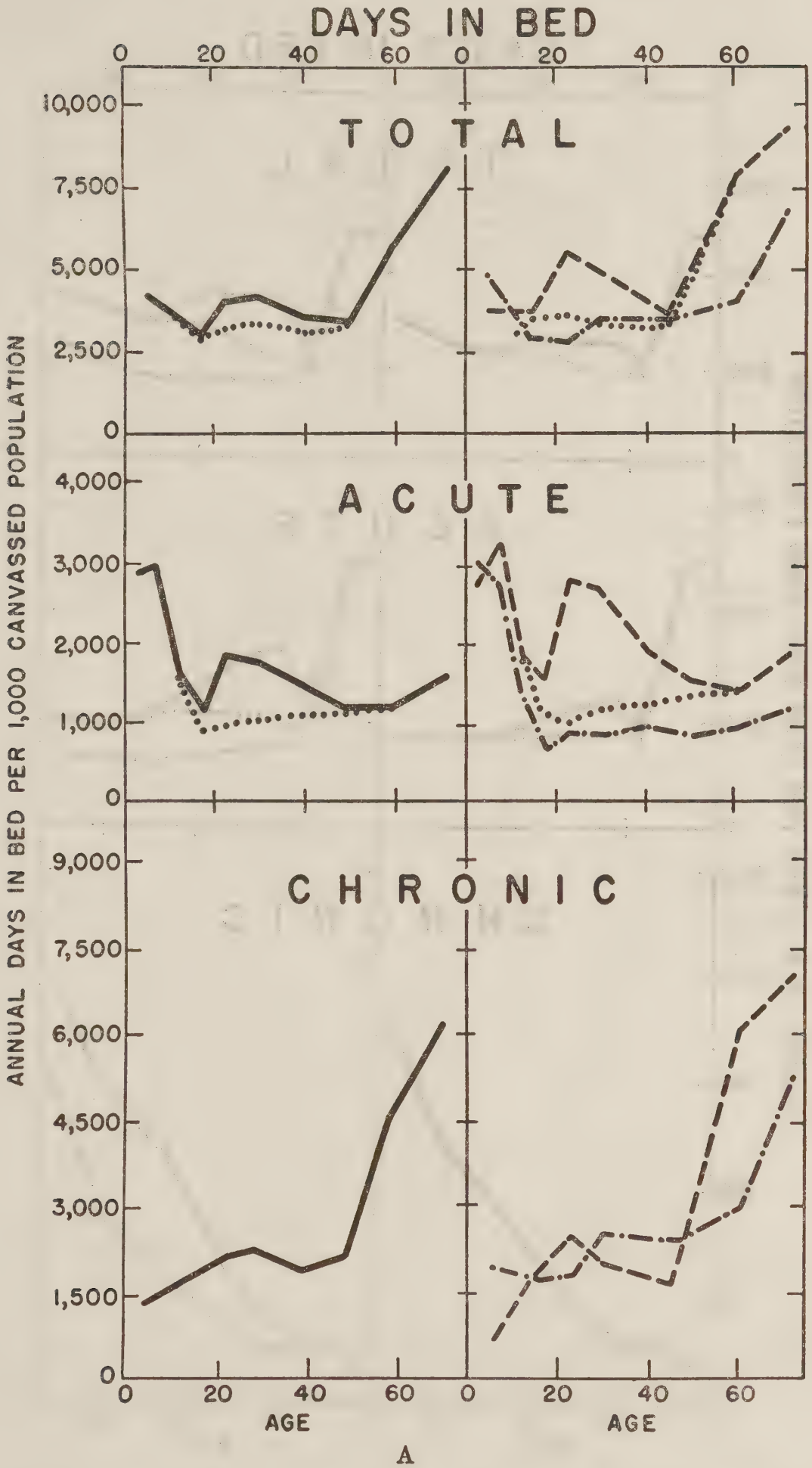
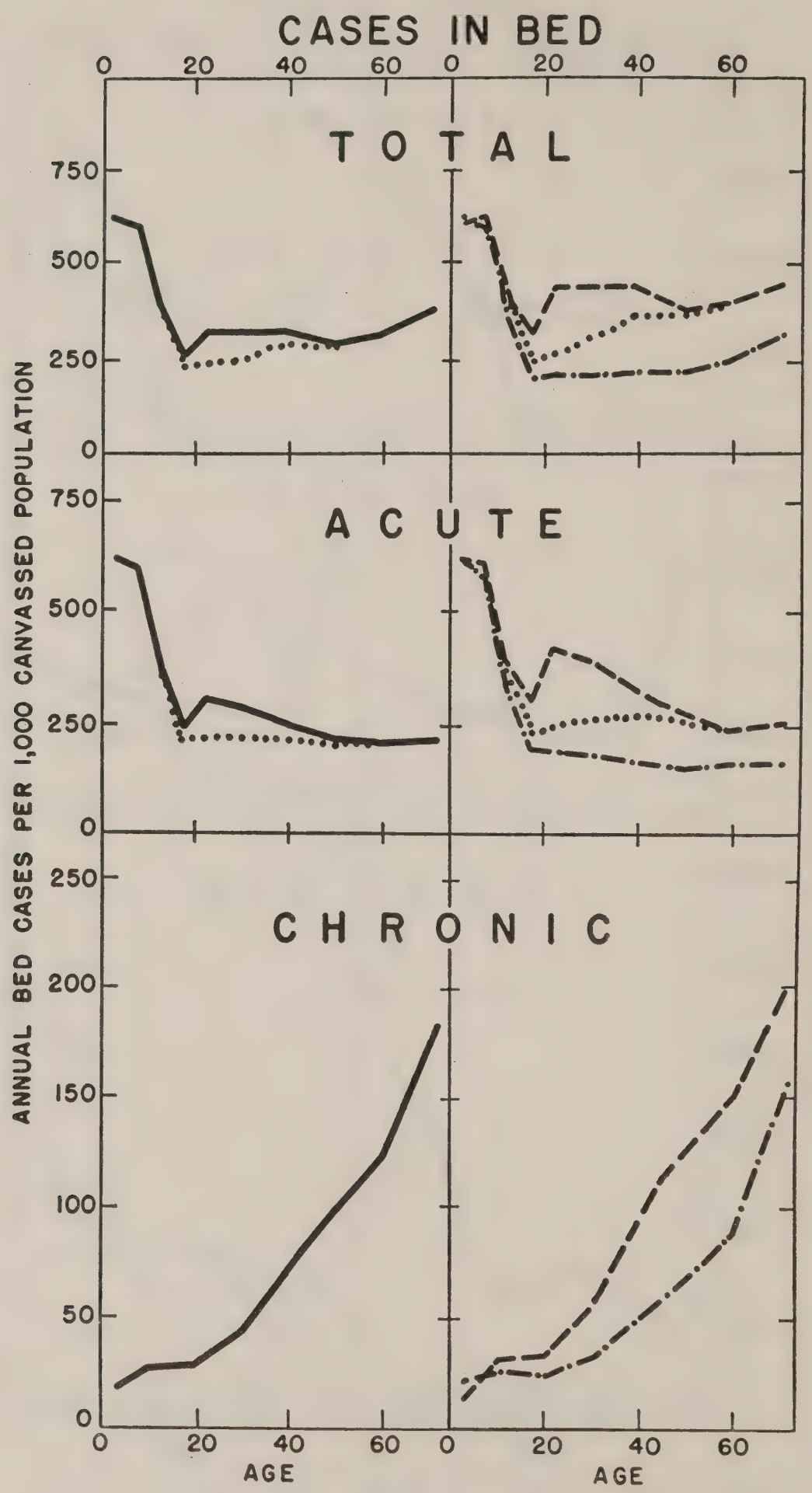


FIGURE 3.—Annual bed case rates and annual days confined to bed per 1,000 persons under observation, by age and sex—3 surveys with 37,988 full-time person-years of observation (Baltimore, Md., Syracuse and Cattaraugus County, N. Y.).


CASES IN BED
TOTAL
ACUTE
CHRONIC
ANNUAL BED CASES PER 1,000 CANVASSED POPULATION
AGE
AGE

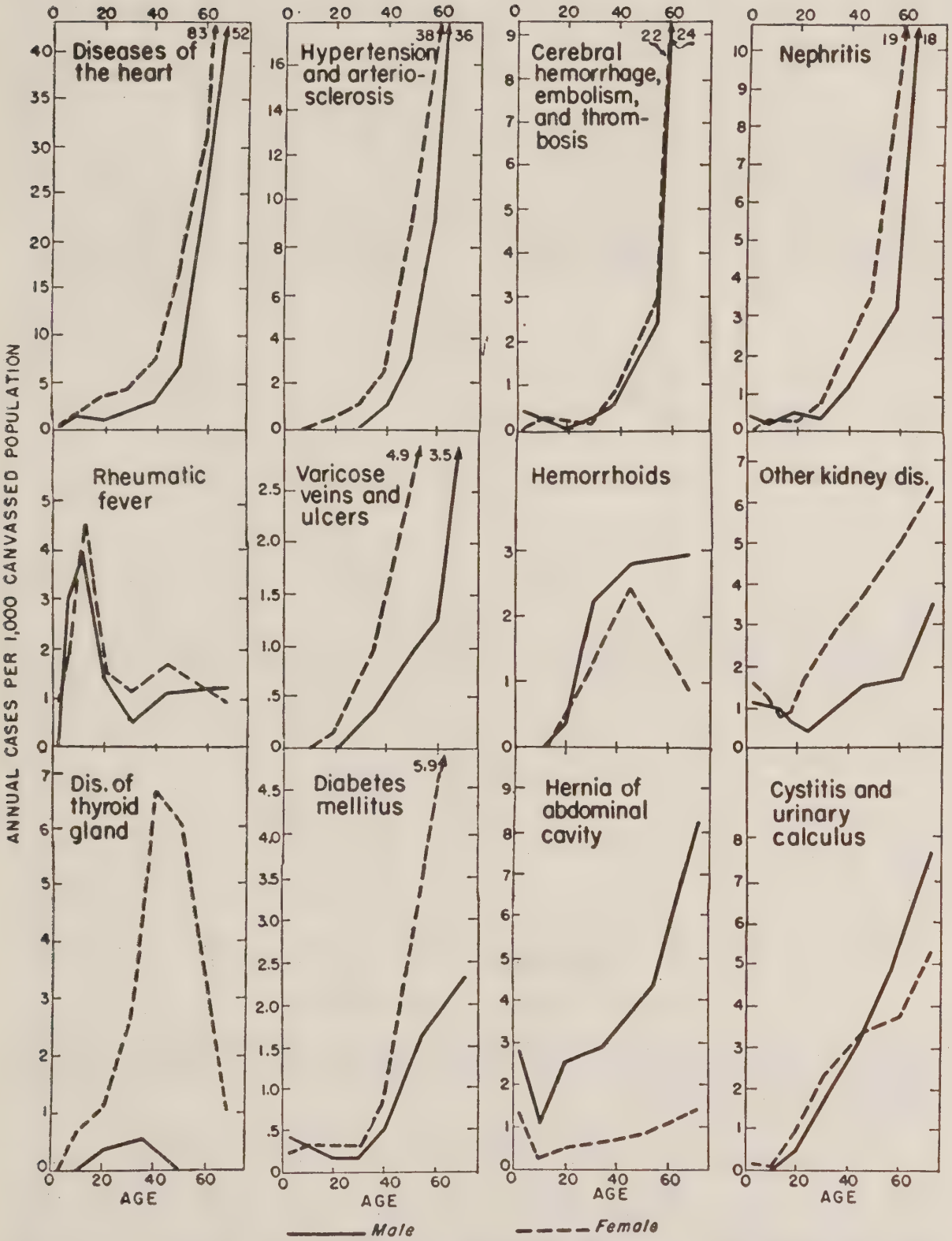


FIGURE 4.—Annual age-specific bed case rates per 1,000 canvassed males and females for cardio-vascular-renal and some other chronic diseases—5 surveys with 80,768 full-time person-years of observation.

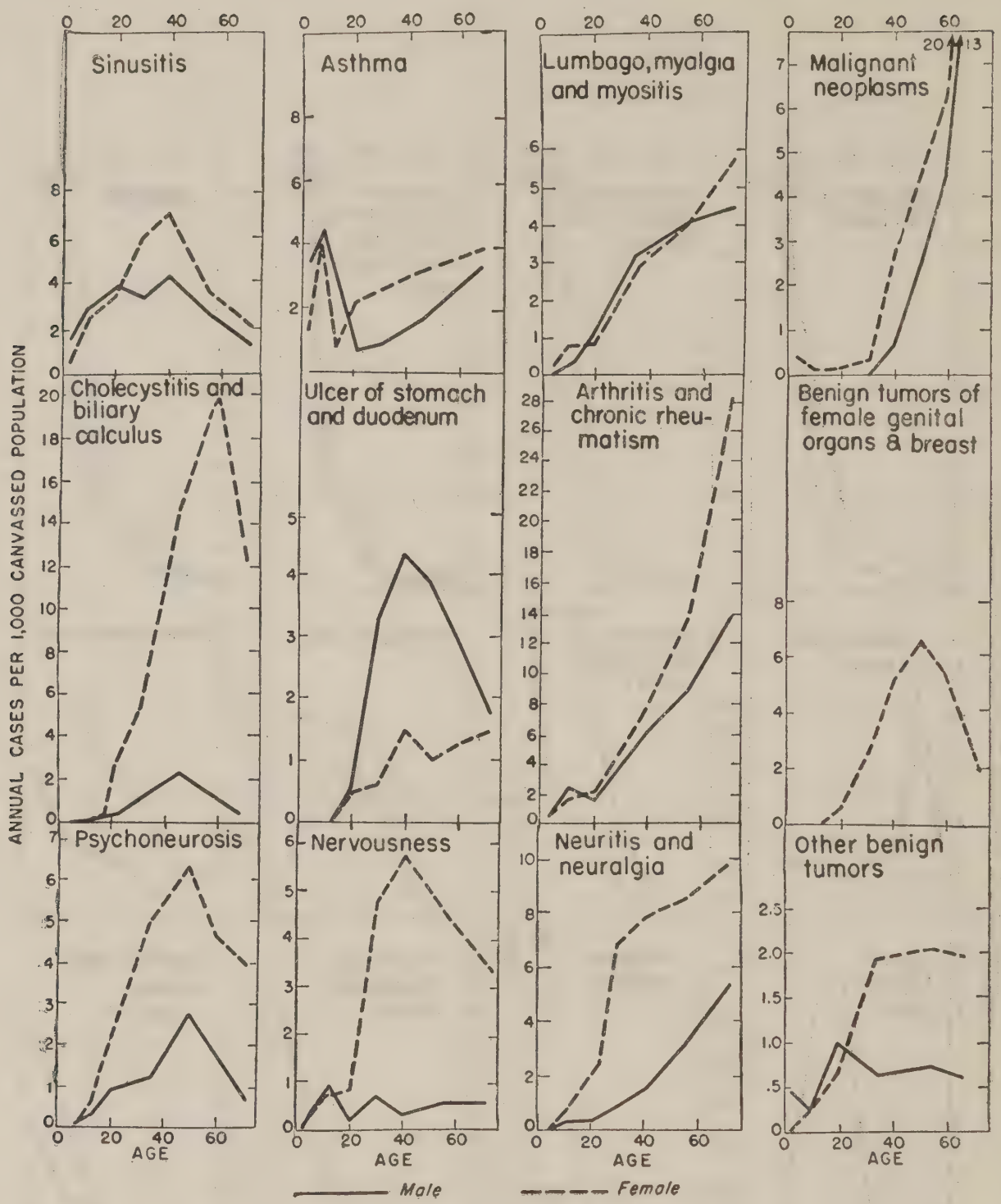


FIGURE 5.—Annual age-specific bed case rates per 1,000 canvassed males and females for miscellaneous other chronic diseases—5 surveys with 80,768 full-time person-years of observation.

AGE AND SEX VARIATION IN SPECIFIC CHRONIC DISEASES

In the preceding section I have discussed some important distinctions and comparisons between chronic and acute diseases as groups. But the physician sees his cases as patients with specific diseases. Figures 4 and 5 show by age and sex the chronic diseases as recorded in the five surveys. The data here used are cases confining the patient to bed for 1 or more days; as nurse and dietitian in general charge of the sickroom, the housewife probably remembers bed cases better than any other type.

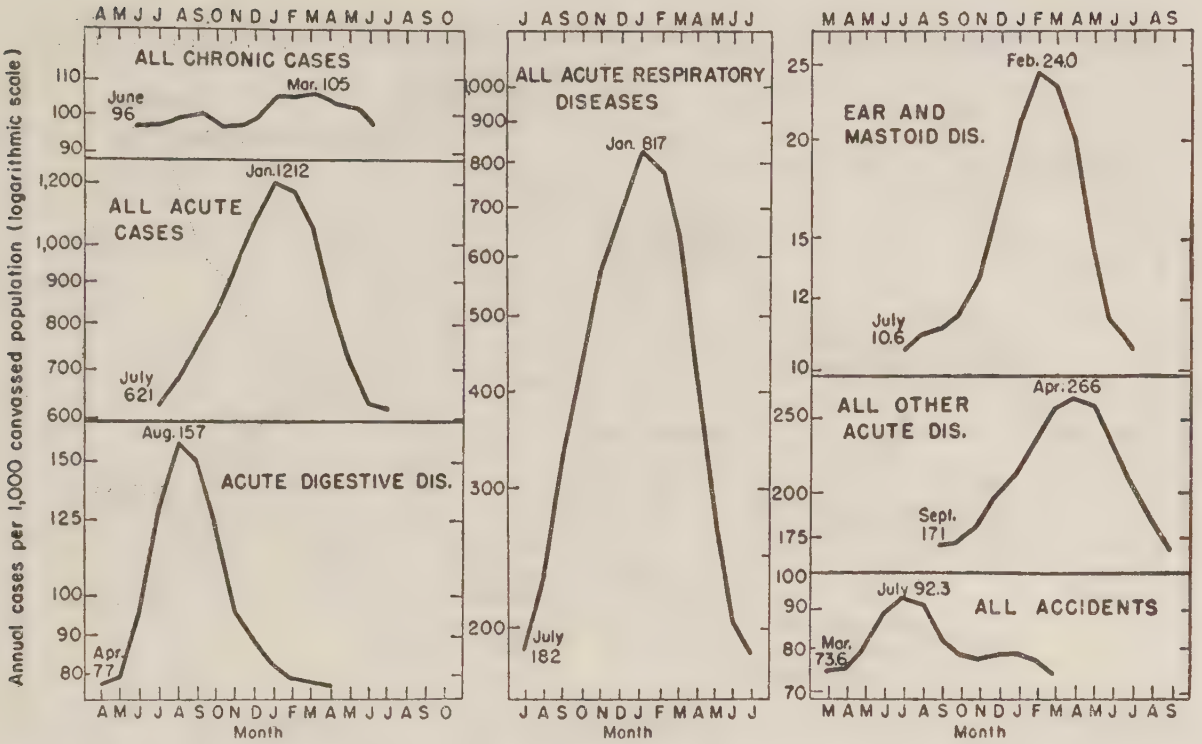


FIGURE 6.—Relative seasonal variation in all chronic cases and in broad groups of acute cases

In the majority of the chronic diseases with data available for this study, women have slightly but consistently higher rates than men. In the cardio-vascular-renal group the only exceptions are cerebral hemorrhage, rheumatic fever, and hemorrhoids, the first two showing little consistent difference between the sexes. However, there are notable exceptions in that some diseases that may occur in either sex nevertheless occur predominantly among females, and a few others occur predominantly among males. For example, diseases of the thyroid gland, cholecystitis and biliary calculus, diabetes mellitus, neuritis, psychoneurosis, nervousness, arthritis, and benign tumors are exceptionally high among women. However, ulcer of the stomach and duodenum, hernia, and, among the acute conditions, accidental injuries and some other diseases are just as exceptionally high among men (3).

SEASONAL VARIATION

In the course of a single year, relatively few new chronic cases occur in the sense of the acquisition of a chronic disease which the patient has never suffered previously. However, acute exacerbations or attacks of chronic diseases which existed prior to the beginning of a survey are more common. Many of the chronic diseases, particularly in the earlier stages of the cardiovascular-renal group, are without disability except in terms of these attacks. Moreover, many of the chronic diseases are insidious in their onset so that the time of the original onset is often hard to determine. By the tabulation of the acute attacks of chronic diseases, one can get a rough idea of the season of the year in which the disease is likely to be more active and cause more trouble for the patient. Figure 6 shows on a logarithmic vertical scale the seasonal curves of all chronic cases and of all acute cases, together with a few important groups of acute diseases. It is here seen that the seasonal variation in acute attacks of chronic diseases is very small as compared with the variation of all acute diseases, and particularly as compared with acute respiratory, digestive, and ear and mastoid diseases.

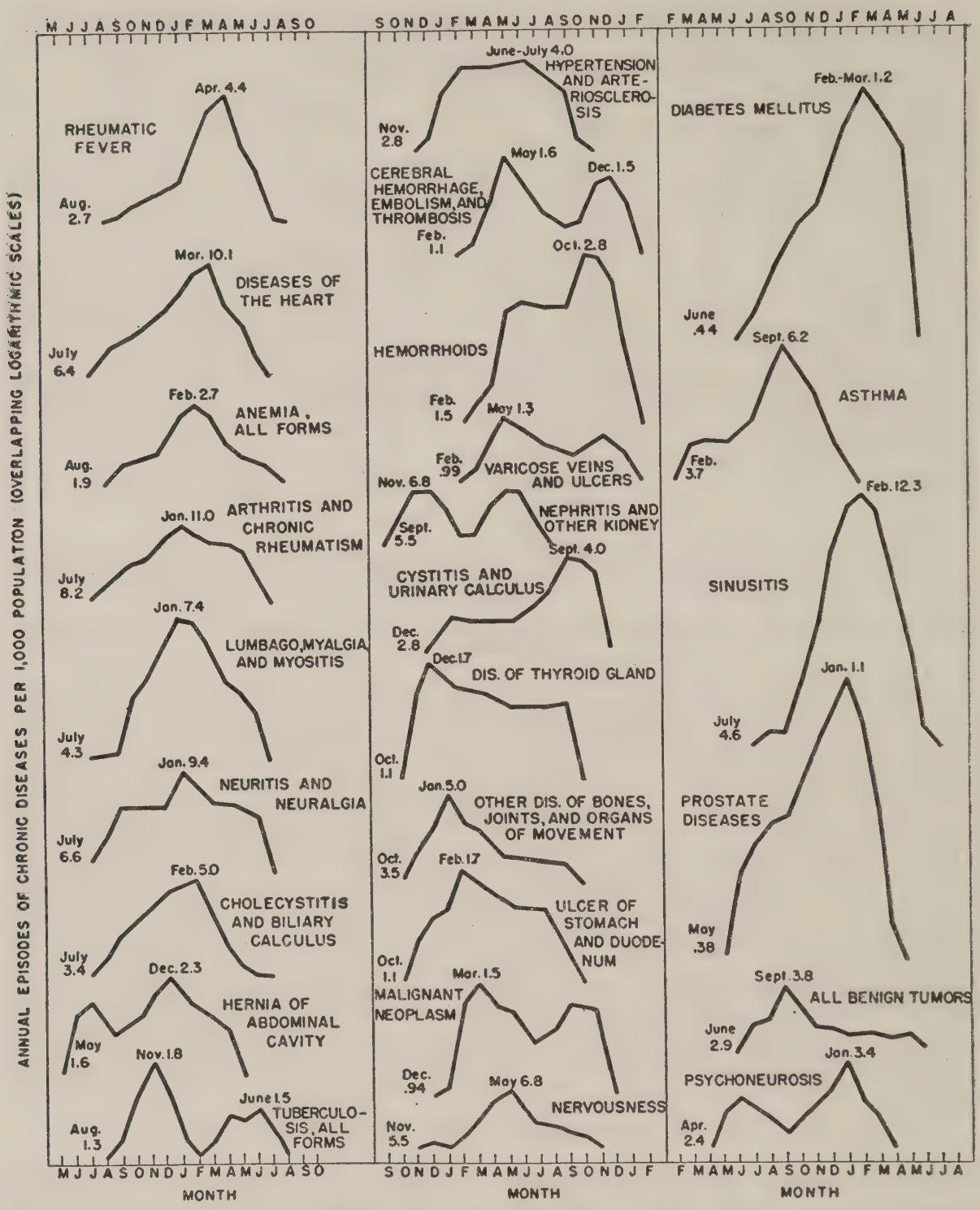


FIGURE 7.—Relative seasonal variation in detailed chronic diagnosis. (Based on annual case rates for each month for periods in each survey of 12 consecutive months or multiples thereof. Data smoothed by 3-period moving average with occasional combination of 2 adjacent months with apparently meaningless fluctuations.)

In figure 7 similar seasonal curves for specific chronic diseases are plotted on a much larger logarithmic scale. Thus the two charts are not comparable, but the various seasonal curves on each chart are comparable with other curves on the same chart.

Because of small numbers of cases, the data shown in figure 7 have been smoothed by a 3-period moving average, with occasional combinations of 2 monthly values to avoid meaningless fluctuations. To save space no vertical scale numbers are used but the low and high

seasonal values are entered on each curve in terms of annual rates for the month. Because this is a logarithmic vertical scale, the shape of a given curve is the same whether the actual rates be large or small. Each curve starts at the low seasonal month (at left), proceeds to the peak month and then returns to the same low month on the right. While the cases are few for most of the diseases, the chart gives a rough indication of the seasonal variation of attacks of the disease.

Of these chronic diseases, diabetes, prostate diseases, and sinusitis show the largest relative seasonal variation, but other diseases such as rheumatic fever, heart diseases, and most of those in the left-hand column of figure 7 show just as regular seasonal patterns but with somewhat smaller relative seasonal differences between the low and high months of the curve. Most of the chronic diseases that have regular single-peak seasonal curves are at their highest in the winter or early spring months.

HOSPITALIZATION

Hospital rates of admissions and of days of care are a measure of the severity of chronic disease as well as a measure of medical care.

Short-term care.—Hospital cases as recorded in family surveys are largely in short-term hospitals, although a few in other types are recorded. In figure 8 the total hospital cases of acute and chronic diseases are shown by age and sex, and by surgical and nonsurgical cases.

Considering acute and chronic surgical cases, it is seen that for each sex surgery is far more frequent on acute than on chronic cases; it is only after about 50 years of age that surgical chronic cases exceed the acute. On the other hand, nonsurgical chronic cases exceed nonsurgical acute cases after about 40 years of age, and at 65 years and over nonsurgical chronic cases among males are nearly equal to the high nonsurgical case rate under 5 years of age. Among females, chronic nonsurgical case rates are above those for acute cases after about 35 years of age if female genital and puerperal conditions are excluded.

Figure 9 shows for the 5 surveys combined the extent and characteristics of hospital cases in terms of bar charts of actual rates for the 15 most frequent chronic hospital cases for admissions and days of care per 1,000 population, percent of patients hospitalized, days per hospital admission, the percentage of hospital cases treated surgically, and the percentage of hospital days on surgical cases. Although this is a large body of information to put in a single chart, it seemed worth while to put in the actual rates to supplement the many data plotted by age but on a more or less relative basis.

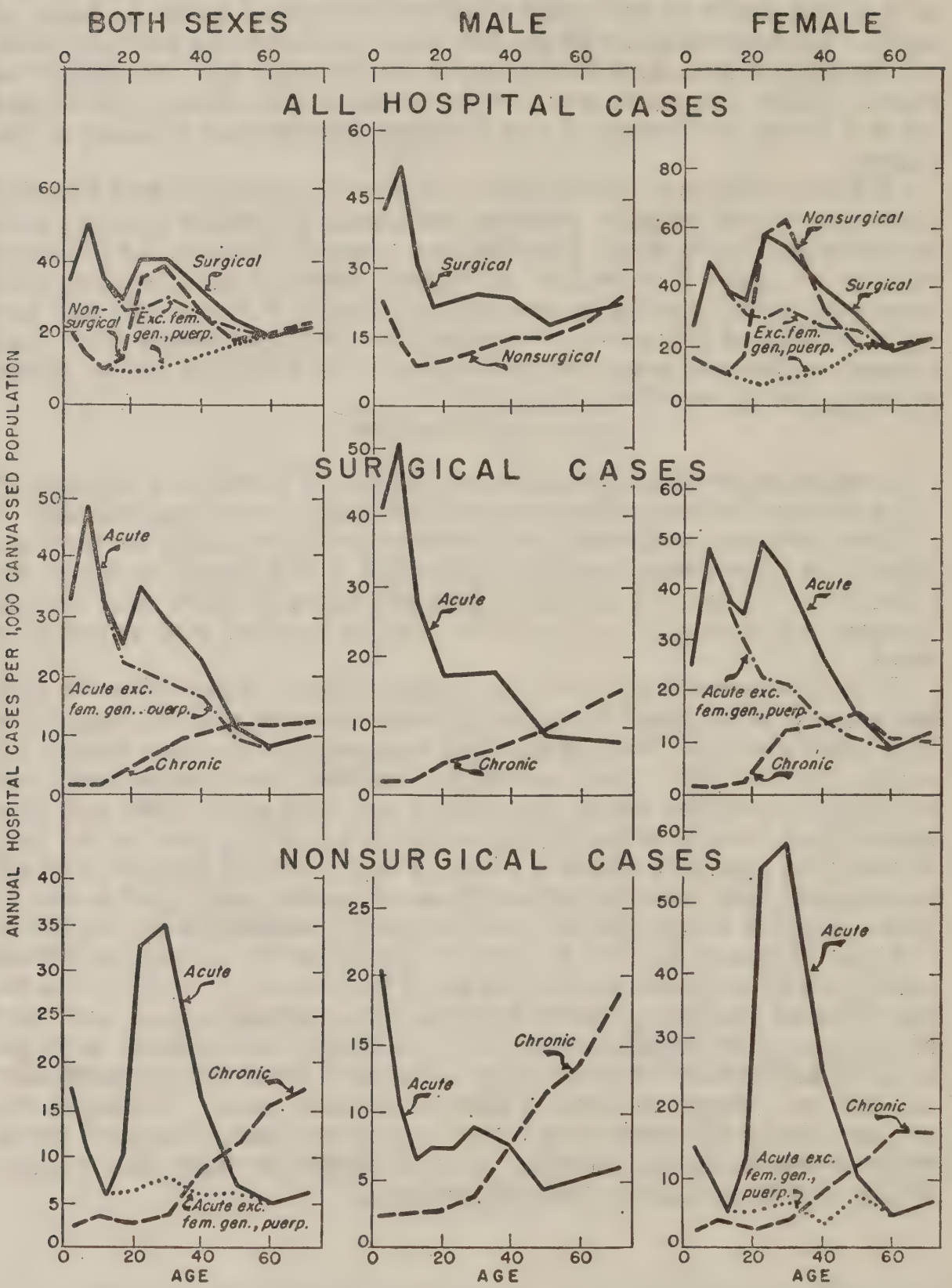


FIGURE 8.—Annual age-specific hospital admissions per 1,000 males and females, classified into surgical and nonsurgical cases, with each category further classified into acute and chronic cases, 5 surveys with 80,768 full-time person-years of observation.

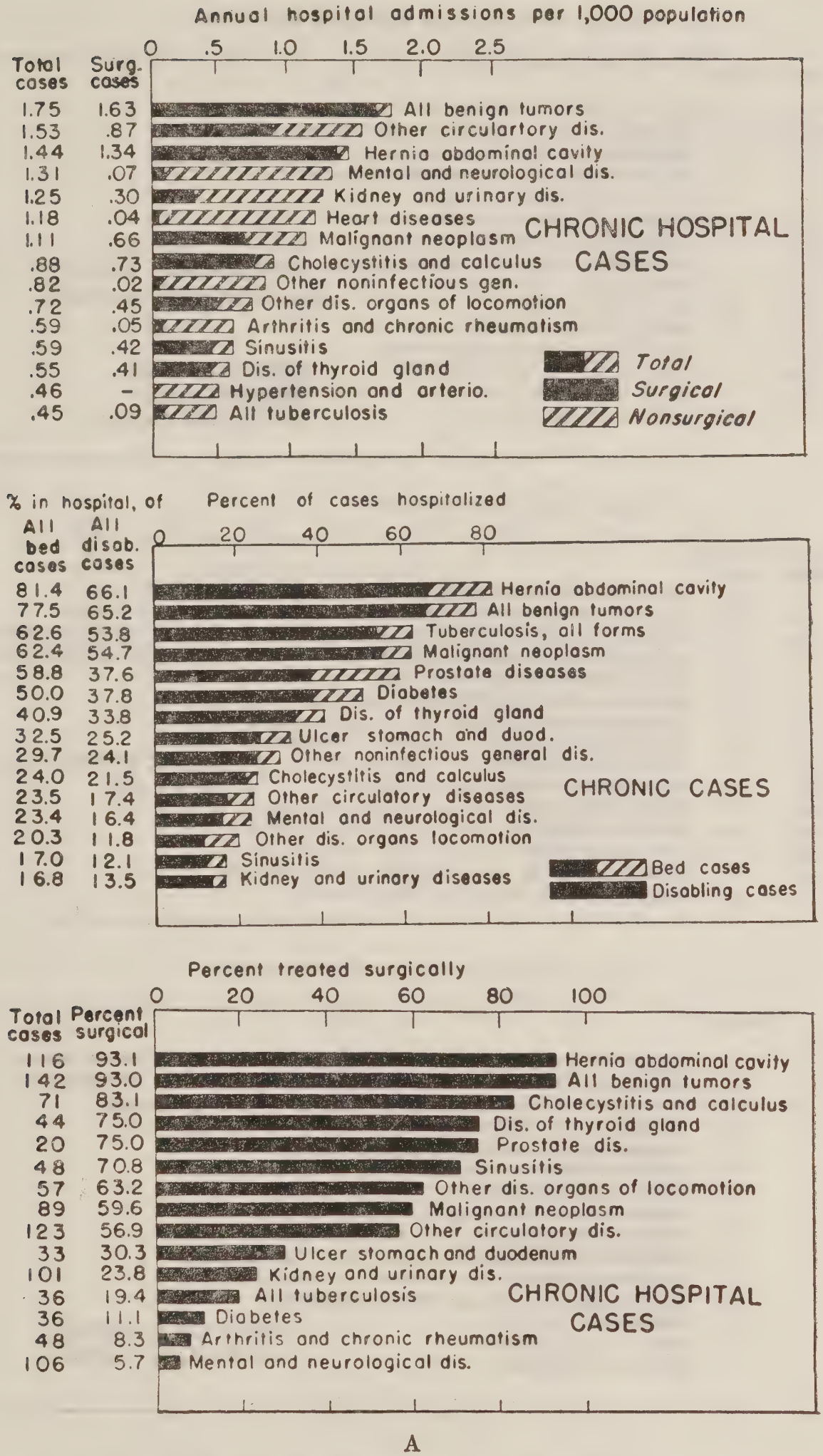


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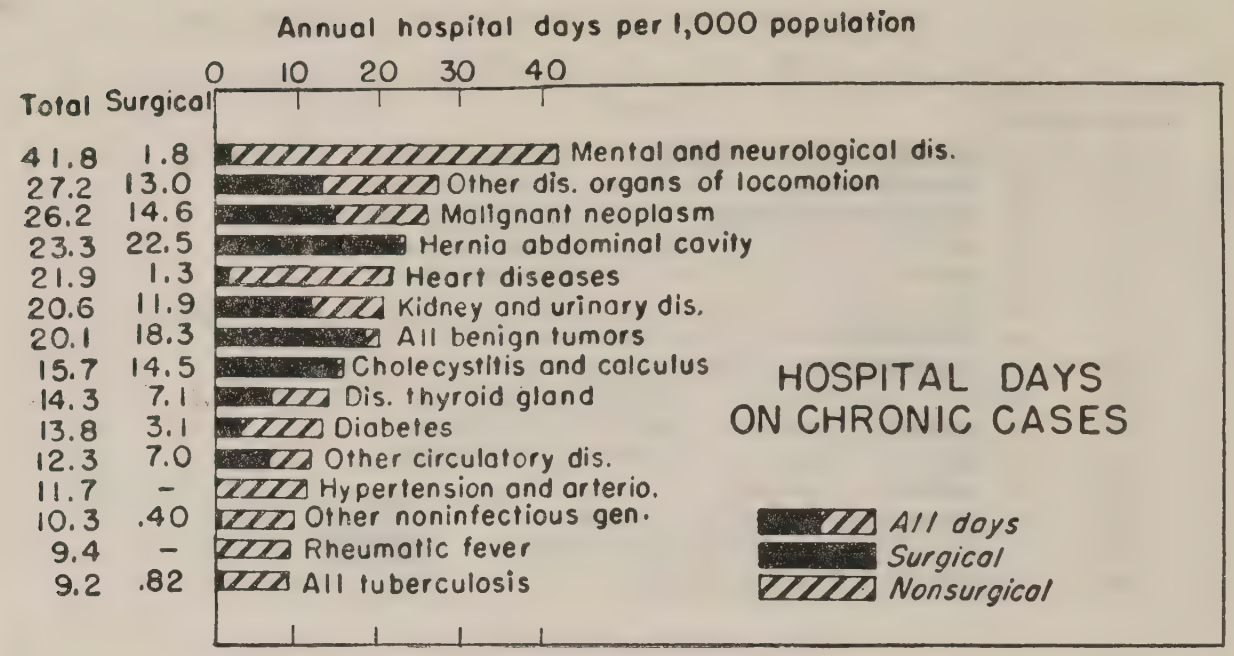
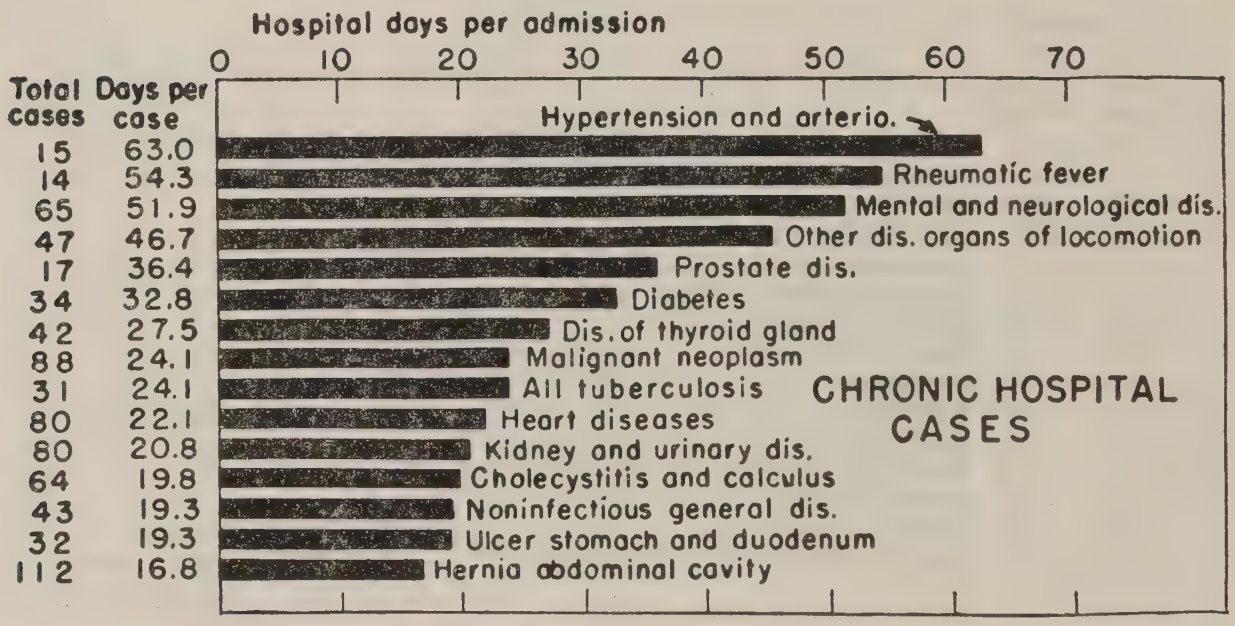
FIGURE 9.—Extent of hospital cases and days of care, and other characteristics of hospital patients in terms of the 15 highest chronic diseases for each characteristic, 5 surveys with 80,768 full-time person-years of observation.


Annual hospital days per 1,000 population
0 10 20 30 40
Total Surgical
41.8 1.8 Mental and neurological dis.
27.2 13.0 Other dis. organs of locomotion
26.2 14.6 Malignant neoplasm
23.3 22.5 Hernia abdominal cavity
21.9 1.3 Heart diseases
20.6 11.9 Kidney and urinary dis.
20.1 18.3 All benign tumors
15.7 14.5 Cholecystitis and calculus
14.3 7.1 Dis. thyroid gland
13.8 3.1 Diabetes
12.3 7.0 Other circulatory dis.
11.7 – Hypertension and arterio.
10.3 .40 Other noninfectious gen.
9.4 – Rheumatic fever
9.2 .82 All tuberculosis
HOSPITAL DAYS ON CHRONIC CASES
All days
Surgical
Nonsurgical


Hospital days per admission
0 10 20 30 40 50 60 70
Total cases Days per case
15 63.0 Hypertension and arterio.
14 54.3 Rheumatic fever
65 51.9 Mental and neurological dis.
47 46.7 Other dis. organs of locomotion
17 36.4 Prostate dis.
34 32.8 Diabetes
42 27.5 Dis. of thyroid gland
88 24.1 Malignant neoplasm
31 24.1 All tuberculosis
80 22.1 Heart diseases
80 20.8 Kidney and urinary dis.
64 19.8 Cholecystitis and calculus
43 19.3 Noninfectious general dis.
32 19.3 Ulcer stomach and duodenum
112 16.8 Hernia abdominal cavity
CHRONIC HOSPITAL CASES

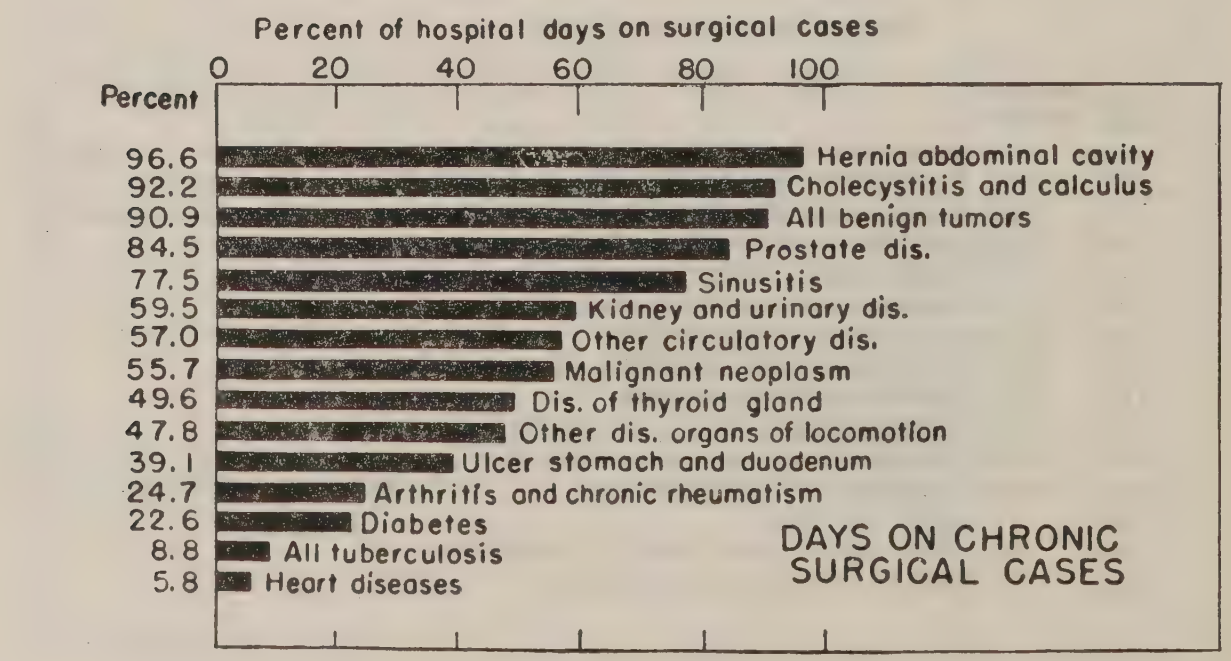

Percent of hospital days on surgical cases
0 20 40 60 80 100
Percent
96.6 Hernia abdominal cavity
92.2 Cholecystitis and calculus
90.9 All benign tumors
84.5 Prostate dis.
77.5 Sinusitis
59.5 Kidney and urinary dis.
57.0 Other circulatory dis.
55.7 Malignant neoplasm
49.6 Dis. of thyroid gland
47.8 Other dis. organs of locomotion
39.1 Ulcer stomach and duodenum
24.7 Arthritis and chronic rheumatism
22.6 Diabetes
8.8 All tuberculosis
5.8 Heart diseases
DAYS ON CHRONIC SURGICAL CASES

Figure 10 shows admissions to hospitals for specific diagnoses as found in the five surveys. Because of small numbers and the fact that persons with minor illnesses are seldom hospitalized, it was possible to show by age only 16 chronic diseases. With some exceptions the variation with age in these hospital cases for both sexes combined is similar to that shown in bed cases of the same diagnosis (figs. 4 and 5).

Long-term care.—Family surveys are not particularly efficient in getting records of resident patients in hospitals for long-term care. Figure 11 shows by sex and age, patients in long-term tuberculosis hospitals, excluding and including Federal hospitals, and patients in long-term hospitals for other chronic diseases except tuberculosis and mental diseases. The relative tuberculosis age curve for both sexes combined remains approximately the same when Federal hospitals are excluded. The curve for females alone is quite different from that for males, both with and without Federal hospitals. After about 35 years of age, the rates for males exceed those for females in both non-Federal and total tuberculosis hospitals, with highest rates at 50 to 60 years of age, which presumably represents veterans of World War I.

Rates for chronic diseases except mental and tuberculosis in long-term hospitals increase rapidly with age, with higher rates for males than females.

No discussion of chronic diseases is complete without consideration of the great body of patients with mental and neurological diseases and defects in special long-term hospitals and institutions for psychotic, mentally defective, and epileptic persons. The 1950 data collected by the National Institute of Mental Health (4) showed 722,508 resident patients in hospitals of these various kinds in the United States. Of the total of both sexes, 80 percent were in long-term hospitals for mental diseases, 19 percent in institutions for mentally defective and epileptic persons, and 1 percent were in psychiatric services of general hospitals. In each of the 3 categories, about 53 percent of the patients were males and 47 percent females.

Figure 12 gives a summary of age-specific rates of admission to these mental hospitals and institutions (except for psychoneurosis), and of resident patients in 1950. The rates are expressed as cases per 1,000 total population of the United States, to be comparable to other illness rates discussed in this review. Although the admission rates are small, they cumulate to a large total of patients in the United States receiving daily institutional care, with annual days of such care amounting to more than that given by all other types of hospitals in the United States.

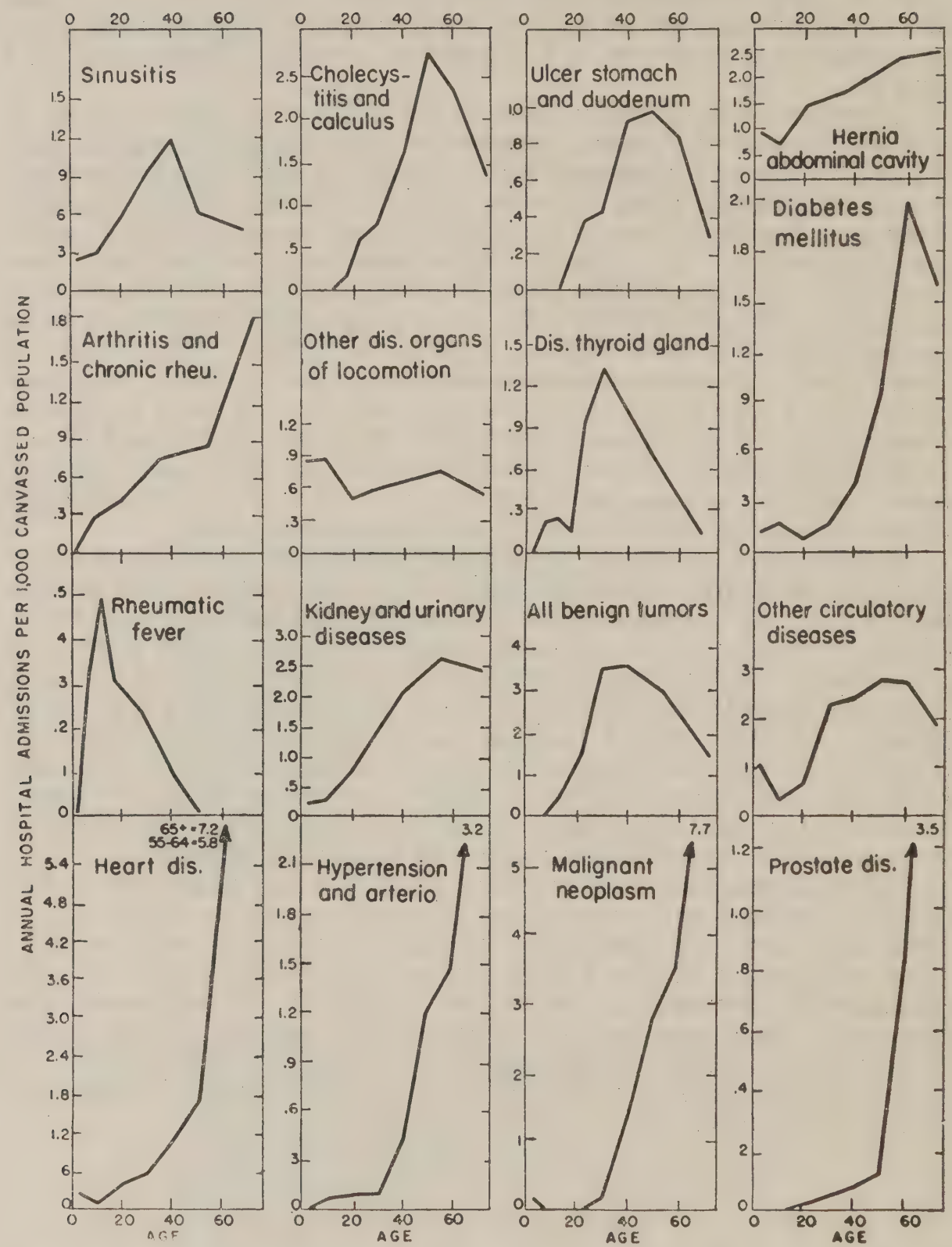


FIGURE 10.—Annual age-specific hospital admission rates of chronic cases per 1,000 canvassed population, by detailed diagnoses—5 surveys with 80,768 full-time person-years of observation.

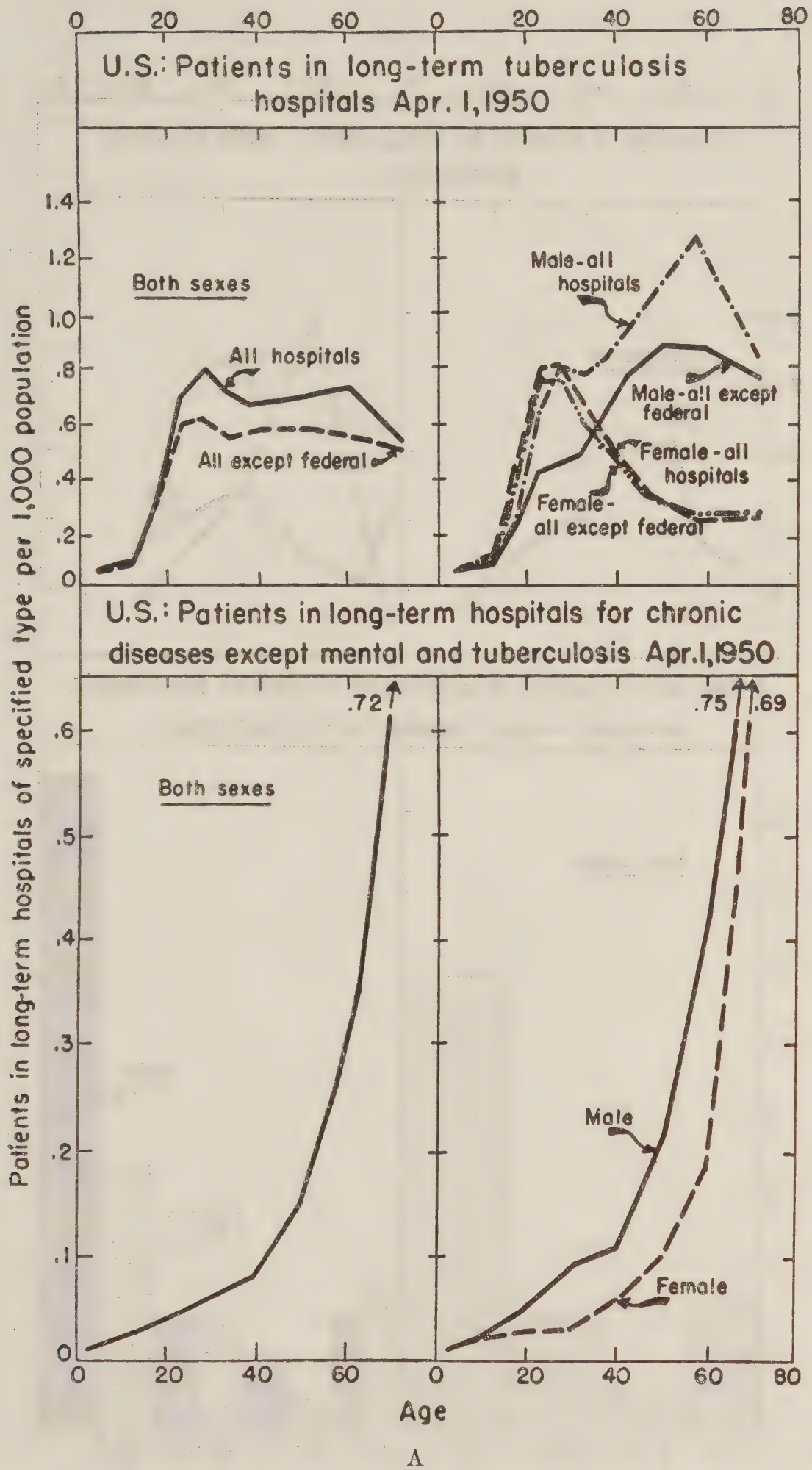


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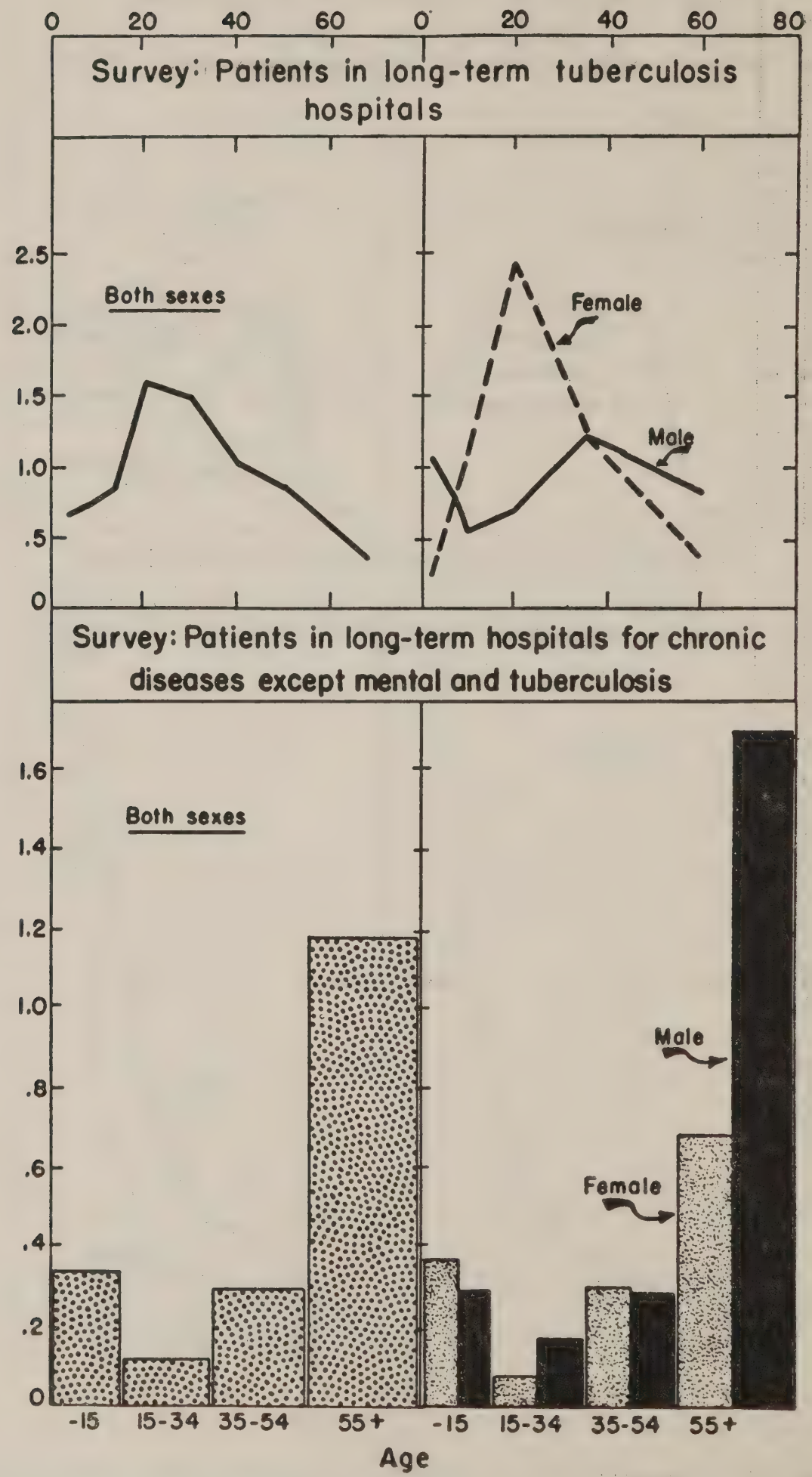
FIGURE 11.—Age-specific rates of patients in long-term tuberculosis hospitals, and in long-term hospitals for chronic disease except mental and tuberculosis, United States, with comparative data for the five surveys (11).


0 20 40 60 0 20 40 60 80
Survey: Patients in long-term tuberculosis hospitals
2.5
2.0
1.5
1.0
.5
0
Both sexes
Female
Male
Survey: Patients in long-term hospitals for chronic diseases except mental and tuberculosis
1.6
1.4
1.2
1.0
.8
.6
.4
.2
0
Both sexes
Male
Female
-15 15-34 35-54 55+ -15 15-34 35-54 55+
Age

The data in figure 12 include only broad classes of patients. Figure 13 shows age curves for first admissions of specific kinds of psychoses, along with a few categories of persons with mental disorders without psychosis who have nevertheless been admitted to these hospitals for psychotic persons. First admissions for all epileptic and mentally defective persons without psychosis are shown for all hospitals and institutions in the two curves on the right of figure 12. It is seen in this figure for the total United States that the peak of first admissions of mentally defective persons comes at 10 to 14 and of epileptic persons at 15 to 19 years of age, but the epileptic admissions at 10 to 14 are next to the highest rate for that condition.

Figure 12 indicates that the highest first admission rate for all psychoses combined is for patients 65 years and older. Reference to figure 13 indicates that this peak is due entirely to psychoses of the senium (senile psychoses and psychosis with cerebral arteriosclerosis); all other psychoses except the miscellaneous and unclassified group have rates at ages 65 and over that are markedly lower than at earlier ages.

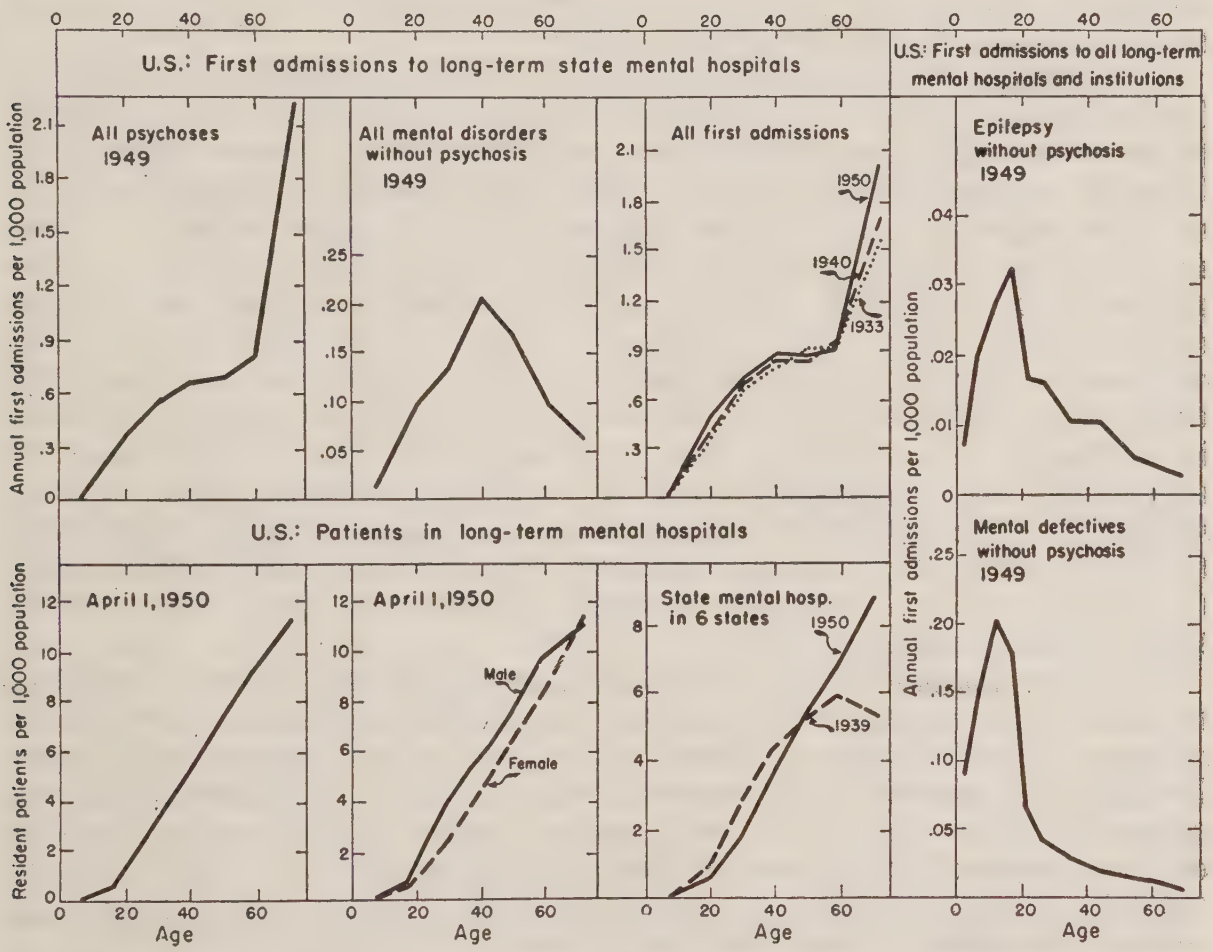


FIGURE 12.—Annual age-specific rates of first admissions to mental hospitals, and patients in all long-term mental hospitals and institutions per 1,000 population, United States (4, 8, 11).

TIME TRENDS

Trends of illness of any kind are hard to find, particularly of illness from chronic disease. Data on illness from all causes are available for United States Army personnel (5) from 1820 to the present, but the great majority of Army personnel are young men who are usually free from chronic disease, not to mention the fact that they are medically examined to select the physically fit.

The various sickness surveys made over the past half century have made no pretense of following any pattern to give data comparable to those from any preceding survey. Even with the best setup, it is extremely difficult to control the various techniques so that results in terms of sickness rates are comparable from one survey to another. Therefore about the only indexes of the trend of illness are (*a*) admissions to hospitals and institutions of various kinds for the care of the sick and defective, and (*b*) death rates, of which it has been said: "It has long been known, from a variety of evidence, that morbidity and mortality do not connote the same things biologically. A person may have a great deal of sickness, continued intermittently over many years, and yet live to a ripe old age" (6). Nevertheless, deaths have been recorded in at least part of the United States for the past half century, with careful tabulations and analyses which, in the absence of illness records, are worth examining. During the period 1900–1953 the death rate from all causes has decreased from 17.19 to 9.59 per 1,000 population. At the same time the death rate from the noninfectious chronic diseases ("the great killers") has increased from 4.43 to 6.85 per 1,000 population, or to 71 percent of the deaths from all causes in 1953.[2]

The trends of various other causes of death are plotted in figure 14 for the period 1900–53. The total death rate is not plotted, but the titles of the six cause groups that make up the total are underlined: Chronic noninfectious diseases, acute infectious diseases, tuberculosis, syphilis and sequelae, rheumatic fever, and "all other causes." Other specific causes plotted on the chart are included in 1 of the 6 categories listed previously. Of the specific chronic noninfectious diseases on the chart, only nephritis shows a downward trend in the past quarter century; the others show an upward trend or no change in that time, including heart diseases, malignant neoplasms, cerebral hemorrhage and other cerebral accidents, diabetes, ulcer of stomach and duodenum, cirrhosis of liver, and hypertension and arteriosclerosis. The acute infectious diseases show a sharp downward trend (except for the great influenza pandemic of 1918), as do also the two chronic infectious diseases, tuberculosis, and, since about 1940, syphilis and sequelae.

Cases in hospitals of different types.—Figure 15 shows trends of admissions to hospitals and institutions of various kinds in the United States. The data for all hospitals except tuberculosis, mental, and Federal, all mental and nervous hospitals, and all tuberculosis hospitals are based on reports published annually in the hospital number of the Journal of the American Medical Association (7). For compari-

[2] Based on an estimate of the death rates from 1950 to 1953 according to the preceding international classifications. Data for 1951–53 are based on the 10-percent sample.

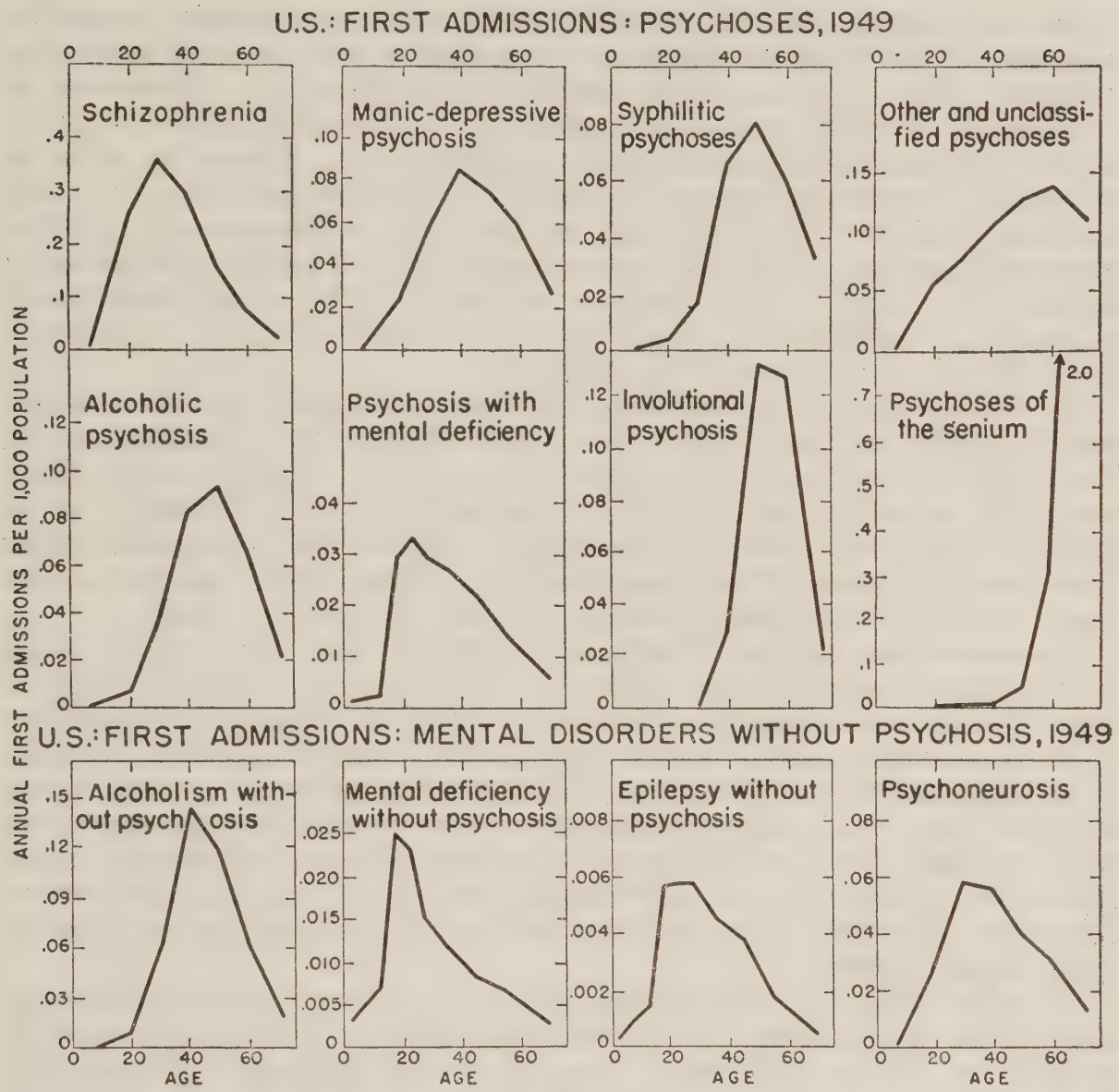


FIGURE 13.—Annual age-specific rates per 1,000 population of first admissions to long-term mental hospitals, by specific psychoses and other mental disorders, United States, 1949 (4).

son, trends of death rates from all causes and from chronic noninfectious diseases have been plotted from 1910 to 1953, but on a larger logarithmic scale than in figure 14.

Considering first the trend of admissions to all short-term hospitals (excluding mental, tuberculosis, and Federal [3]), as compared with that of admissions to long-term mental and nervous hospitals, the former increased 104 percent during the period 1935 to 1953, as compared with 52 percent for the latter. On the other hand, the increase in days of hospital care in the long-term mental and nervous hospitals during the same 18-year period was only 14 percent, the average duration of the cases being so long that the relatively few admissions during a single year do not greatly change the average days from that of the already large number of accumulated cases in these long-term mental hospitals.

From the reports of the United States Census (8) and the National Institute of Mental Health (4), it was possible to carry the trend of first admissions of epileptic and mentally defective persons from 1929 to 1949, but the data here shown are for a five-period moving average from 1931 to 1947. These data exclude the patients with diag-

[3] Federal hospitals show a large increase in admissions during World War II, so the exclusion of the Federal hospitals gives a more normal picture of the increase in admissions.

noses with psychosis but include those without psychosis in mental hospitals as well as in institutions for epileptic and mentally defective persons. The data are shown graphically in figure 15. Decreases in admissions to institutions for epileptic and mentally defective persons are often attributed to lack of available beds. However, patients in both categories are generally cared for in the same institutions but the data indicate that from 1932 to 1947 first admissions of epileptic persons decreased 37 percent, as compared with 14 percent for mentally defective persons.[4] This situation suggests that the newer treatments to prevent epileptic seizures may be decreasing the admission rates of epileptic persons to institutions.

In the lower right-hand chart of figure 15 there is a five-period moving average of admissions for mental disease to long-term mental hospitals of New York State from 1911 to 1951. Prior to 1924 there was little variation in average annual admissions, but from 1924 to 1944 the relative increase is less than in admissions to hospitals other than mental, tuberculosis, and Federal. After 1944, annual admissions to New York State mental hospitals increase very little.

Trends of admissions to and days of care in long-term tuberculosis hospitals as reported in the Journal of the American Medical Association (7) are also shown in figure 15. Tuberculosis admissions per 1,000 population show irregular waves, but in total days of care there is an increase from 1935 to 1941, followed by a decrease to a minimum in 1947, after which there is a moderate increase to 1953, the last year with available data. This latter rise may be due to intensive case-finding compaigns by the mass X-ray technique. It may be seen in figure 14 that the death rate from tuberculosis shows no such rise as here noted in cases.

Hospital admissions of tuberculosis cases among active members of the United States Army decreased from 2.75 per 1,000 mean strength in 1930 to 1.22 in 1950, or 55 percent in the 20 years. Meanwhile, death rates from tuberculosis in the United States Army decreased in the same period from 0.24 per 1,000 in 1930 to 0.019 in 1950, or 92 percent (10). The tuberculosis death rate among civilian males of similar ages (average of rates for ages 15 to 24 and 25 to 34) decreased from 0.816 per 1,000 population in 1930 to 0.138 in 1950, or 83 percent.

These and other data suggest that the long-time trends of sickness may have increased less or may have declined in the last quarter century, even though hospital care has increased.

[4] The same situation of a greater percentage decrease in first admissions of epileptic than of mentally defective persons is found also in New York State alone, but in New York the two groups are cared for in separate institutions, so the decreases could both be due to lack of beds, as the report indicates (9).

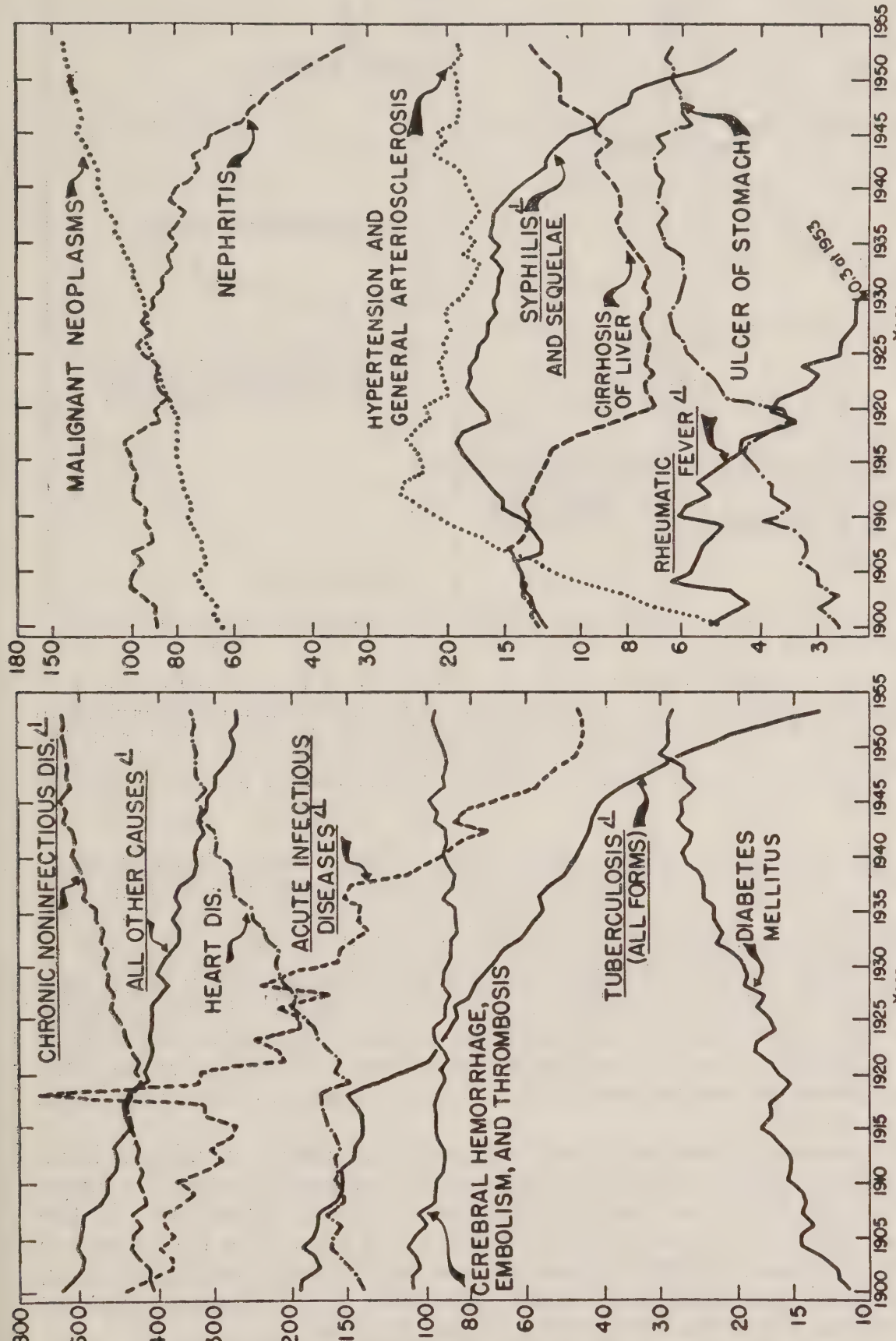


FIGURE 14.—Trends of death rates from specific causes, 1900–1953, U. S. Death Registration States. (1950–53 rates corrected to level of prior revisions of International List. (12, 13) /1—These six cause groups make up the total for all causes.)

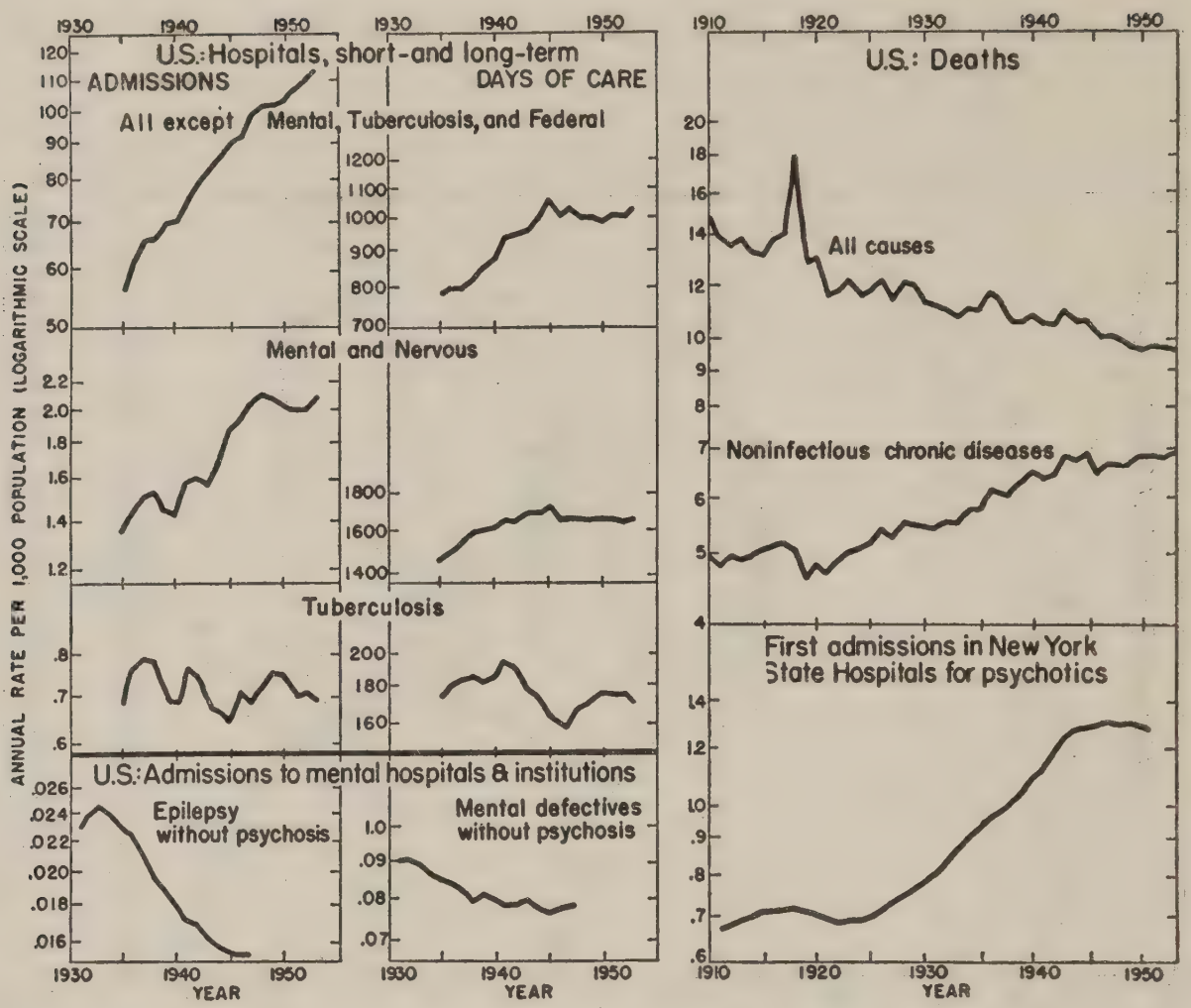


FIGURE 15.—Trends of admissions to and hospital days in several types of hospitals and institutions from about 1935 to 1953, and trends of admissions to all New York State psychotic hospitals, with some trends of deaths in the United States, 1911–50 (4, 7–9). (Admissions to psychotic hospitals and institutions for mentally defective and epileptic persons are five-period moving averages.)

Specific psychoses.—Here, as in other illness data, there is more meaning to trends of admissions for specific psychoses than for admissions of all psychoses combined. Figure 16 shows for 7 specific and important psychoses the trend (5-period moving averages) of admissions to New York State mental hospitals for both sexes and by sex for 6 of the psychoses. The psychosis that occurs most frequently, schizophrenia, is not shown by sex because the differences in the rates for males and females are not large. The relative increase in admissions for schizophrenia is less than in most of the psychoses that are increasing.

Psychosis with cerebral arteriosclerosis and senile psychosis have followed reasonably similar trends, especially since about 1935; many psychiatrists combine them under the name of psychoses of the senium. Both increased until 1943 but after that time the rates are roughly constant. Both diagnoses show considerable sex differences, but cerebral arteriosclerosis admissions are more frequent among men and senile psychosis rates are higher for women.

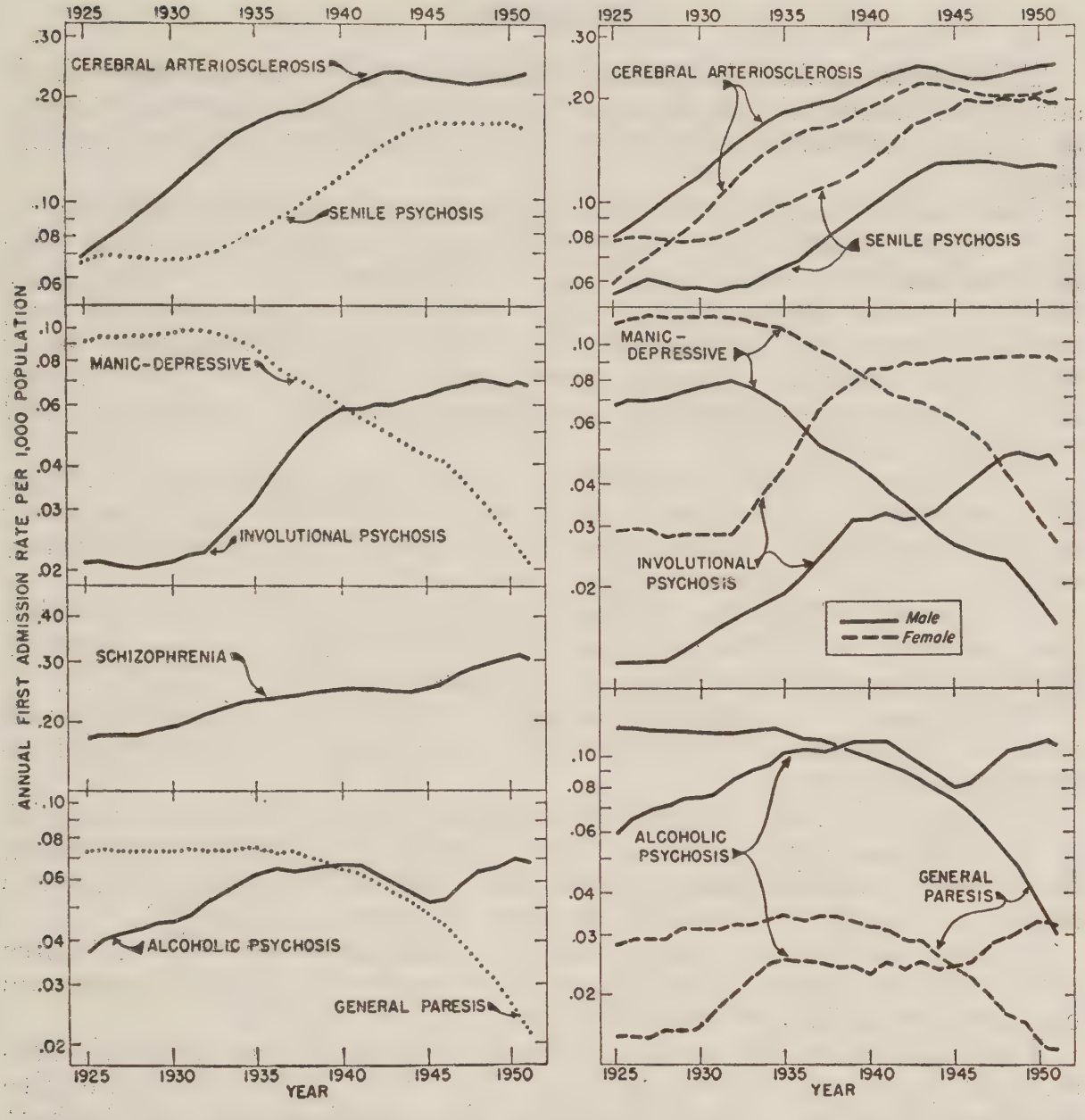


FIGURE 16.—Trends of admissions (five-period moving averages) for specific psychoses to New York State mental hospitals, by sex, 1925–50. (9)

Manic-depressive psychosis and general paresis are definitely on the decline since about 1935. Rates for general paresis are much higher for men than women, but the relative difference is less in recent years than formerly. Manic-depressive psychosis rates are higher for women than men. Alcoholic psychoses show, with some exceptions, a generally rising trend, with rates that are very much higher for men than women.

It is not intended in this discussion of trends of hospital care to suggest that such trends are an index of trends of illness in general. In fact there are conditions which increase hospitalization that have no particular relation to the trend of illness. For example, death rates have been on the decrease for many years but the proportion of all deaths in the United States that occurred in hospitals increased from 34 to 50 percent in the years 1935–49. The birthrate in the United States has been increasing and the proportion of live births that occurred in hospitals has increased from 37 to 88 percent in the period 1935–50. These and other conditions make for more hospital care but not for more illness in the community in general. Similarly, prepaid hospital care and payment for care of industrial accidents under compensation tends to increase hospital care without increasing the general level of illness.

Summary

This review of chronic diseases is based largely on data from periodic surveys of households made over a period of years, supplemented by data from long-term tuberculosis and mental hospitals and institutions.

Cases as here used represent attacks or episodes of illness that lasted for 1 day or longer. They are subdivided into (*a*) nondisabling with no time lost from usual activities, (*b*) disabling with 1 or more days lost from work, school, housework, or other usual activities, (*c*) bed, with 1 or more days confined to bed, and (*d*) hospital, with 1 or more nights in a hospital. Disabling plus nondisabling give the total, bed being a subclass of disabling, and hospital being a subclass of bed cases (figs. 1, 2, 3).

Each chronic disease has its own characteristic variation with age. The majority of the diseases occur more frequently among women; some diseases stand out with very large excesses for women and a few with just as large excesses for men (figs. 4, 5).

The attacks of chronic diseases show much less seasonal variation than attacks of acute diseases. However, many of the specific chronic diseases show characteristic seasonal variation (figs. 6, 7).

While there is considerable surgery in chronic cases, there is much more in acute cases. Obstetric cases loom large in nonsurgical hospital practice (fig. 8).

Average durations, relative age incidence, and other characteristics of hospitalized chronic illness vary greatly for different diagnoses. The relative age incidence in hospital cases of specific diagnoses is similar to that in bed cases of the same diagnosis (figs. 9, 10).

Patients in long-term tuberculosis hospitals in the United States per 1,000 population show a peak for females at 25 to 29 years as compared with 50 to 60 years for men (fig. 11).

First admissions of specific psychoses to hospitals for psychotic persons show peaks at various ages from 15 to 19 to 55 to 64 with definite declines thereafter, except psychoses of the senium with the highest rate at 65 years and over (figs. 12, 13).

Death rates from the chronic noninfectious diseases have increased steadily in the last half century but the chronic infectious diseases have decreased rapidly (fig. 14).

Admissions to the various types of hospitals have increased during the past 15 to 20 years except admissions of epileptic and mentally defective persons, which have decreased, particularly for epileptic persons (fig. 15).

Psychoses whose first admissions to New York State mental hospitals have generally increased since 1925 are senile, involutional, schizophrenia, alcoholic, and those with cerebral arteriosclerosis. Psychoses with a downward trend are manic-depressive and general paresis. Psychoses with higher admission rates for men than women are alcoholic, general paresis, and those with cerebral arteriosclerosis; those with higher rates for women than men are senile, involutional, and manic-depressive psychoses (fig. 16).

Appendix A

CONFIRMATION OF DIAGNOSES BY ATTENDING PHYSICIAN

The diagnoses as reported by the household informant (usually the housewife) were entered on the schedules, together with the name of the attending physician and of the hospital if the patient was hospitalized. At the end of each round of the periodic visits, cases reported by the families as attended by a given doctor were assembled on another form, including the patient's name, age, sex, and other identifying information, the date of onset of the illness, and the diagnosis given by the family informant. The sheets for each doctor were mailed to him with a mimeographed letter explaining the nature and purpose of the study and requesting that he check the diagnoses that were correct and give the correct diagnoses for any that were wrong. Ample space was allowed for writing in the correct diagnosis. Although the letters were mimeographed, they bore the signature of the Surgeon General of the Public Health Service. The returns were good, but of course there was no way to check the diagnoses in unattended cases, and many other patients with mild cases had only a single visit to or from the doctor. Some diagnoses may have been checked from memory and others with little reference to records, but frequently the family informant was able to repeat what the doctor had said was the matter, even when she knew little about the disease. Although the attending doctor checked many symptomatic and some ill-defined diagnoses as correct, his diagnosis was always used in preference to that of the family informant when there was any difference between the two.

Appendix B

DISTINCTION BETWEEN ACUTE AND CHRONIC DISEASE

A statement on the method used in this study to distinguish between acute and chronic disease seems pertinent. The usual meaning of chronic disease refers to illness of long duration. In this paper, a disease or illness has also been classified as chronic if a history of one attack may be expected to be followed by other attacks of the same disease which are related to the preceding attacks because the patient was not cured but the disease was only quiescent between attacks. But so many patients with chronic disease have long periods without measurable disability that it seems appropriate to consider along with continuous total or partial disability these attacks with relatively short periods of inability to be about usual activities and more serious episodes of illness requiring the patient to remain in bed at home or in a hospital.

The total time since the original onset of the chronic disease is important but so are the number of these more severe attacks and the total time unable to be about usual duties, the total days in bed, and the total days of hospital care. Records of all of these data, as well as of recovery or death, are necessary to measure the severity of a chronic disease in terms of time, inconvenience, and loss caused by a disease.

To cite a few examples, tuberculosis usually keeps a patient in bed at home or in a hospital for major parts of the day over long periods of time, and thus conforms to the usual definition of chronic disease as one of long duration. On the other hand, in many forms of heart disease the patient can do office or other light work for long periods without attack or other manifestation of the disease. However, a change to work involving greater stress and strain, either mental or physical, may cause the patient to suffer attacks which make him unable to work or be about other usual activities for a short or even a long period.

Asthma and hay fever are generally considered chronic diseases, although for considerable periods the individual may not be bothered by these diseases because the etiological factor is not present; if ragweed pollen is the causative agent, it would not be present except at certain seasons of the year and in certain latitudes. On the other hand, if house dust or some substance involved in the person's work is the etiological agent, these allergies would give almost constant trouble. In either case, the diseases would be classed as chronic.

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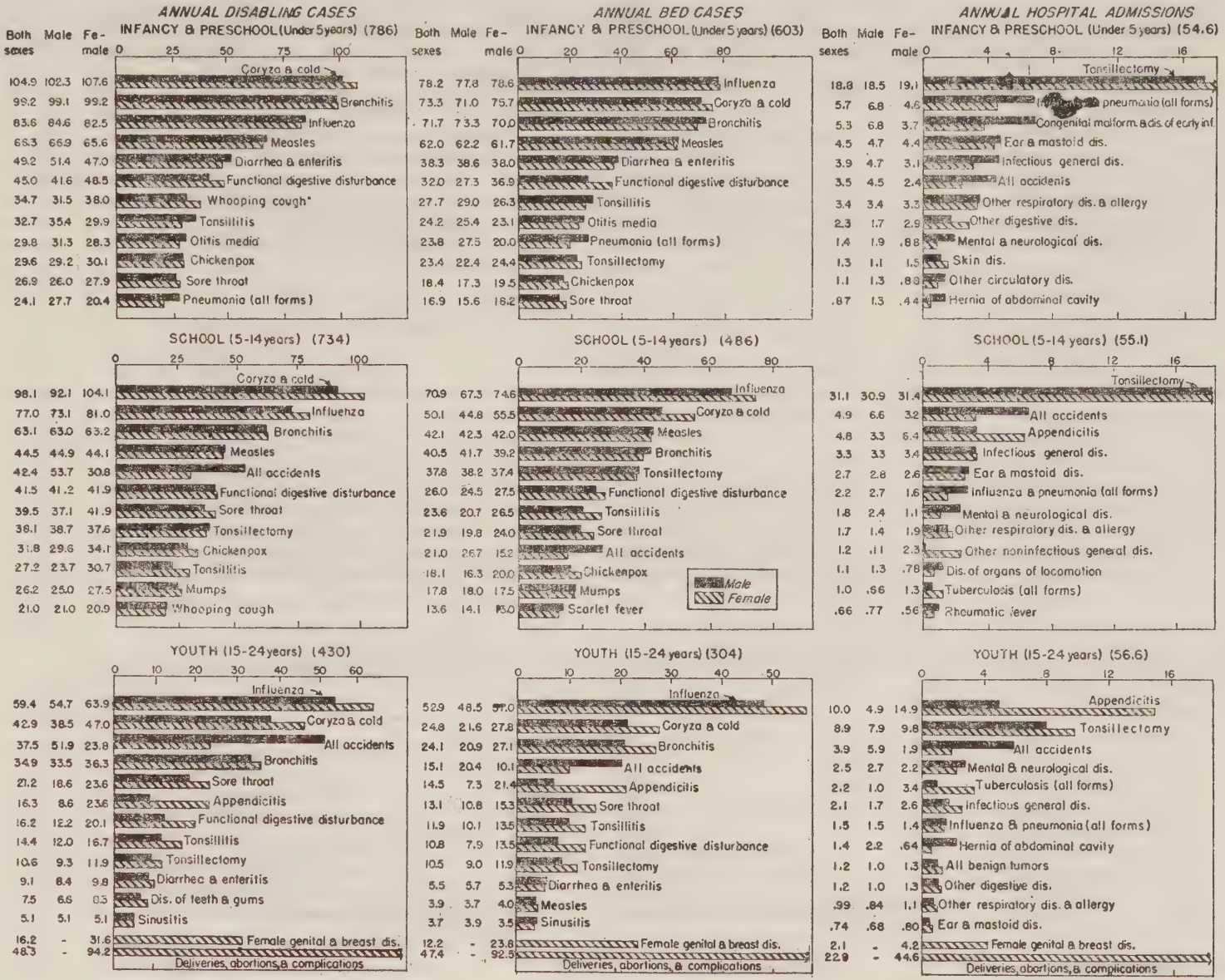
APPENDIX

PART I. MORBIDITY

CHART I. MORBIDITY BY AGE GROUPS

(The numbers in parentheses for each age group represent annual rates of the kind in the chart for all causes for that age.)



See footnote on p. 183.

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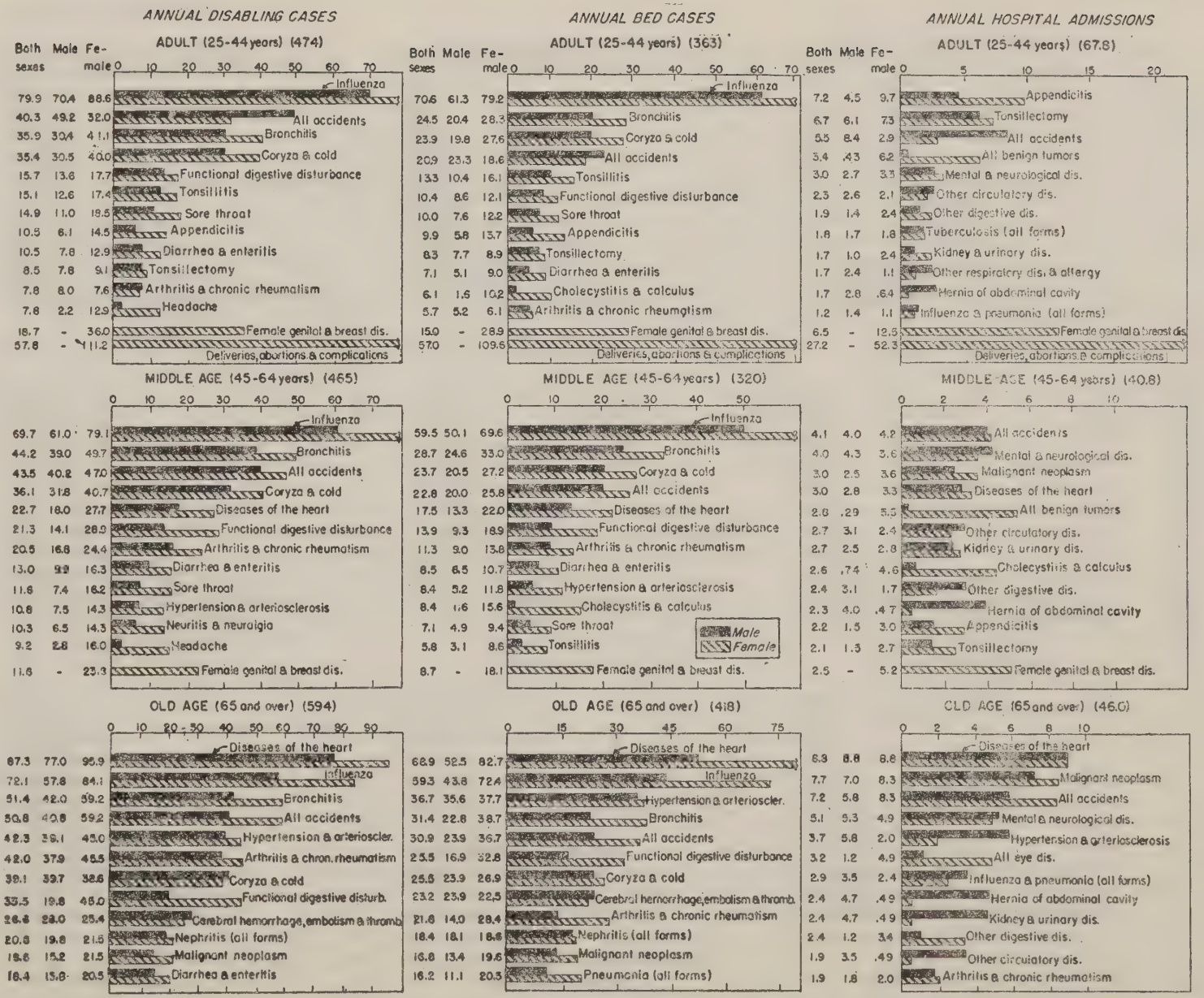


FIGURE 1.—The 12 diagnoses with the highest annual rates per 1,000 population in each of 6 age groups, for disabling and bed cases and for hospital admissions—5 household surveys with visits at intervals of 1 to 3 months, covering a total of 80,768 full-time person-years of observation for white persons.

[1] From Public Health Monograph No. 30, Major Causes of Illness and of Death in Six Age Periods. U. S. Department of Health, Education, and Welfare, Public Health Service, Publication No. 440 (Washington, Government Printing Office: 1955), fig. 3, pp. 6–7. Based on 5 Public Health Service surveys of illness, includes 38,544 persons in 18 States observed for a full year between 1928 and 1931, 4,235 persons in 18 States observed less than 12 months between 1928 and 1931; 6,341 persons in Syracuse, N. Y. (January 1930 to June 1931); 10,142 persons in Cattaraugus County, N. Y. (October 1929 to June 1932), and 21,505 persons in Baltimore, Md. (June 1938 to May 1943).

Data on disabling, bed, and hospital cases imply inability to be about for 1 or more days, confinement to bed for 1 or more days, and hospitalization for 1 or more nights. Cases in institutions for long-term care included are but their numbers were so small that they were not shown separately.

TABLE 1.—*Comparative distribution of aged and other patients for selected diagnoses, New York City municipal general hospitals, May–October 1952*

Selected diagnoses	Percent distribution by diagnosis			
	Aged patients		Other patients	
	Number	Percent	Number	Percent
Total:				
Aged	19,676	100.0		
Other			102,276	100.0
Selected arteriosclerotic and degenerative heart disease	2,505	12.7	1,201	1.2
Malignant neoplasms	2,027	10.3	3,008	2.9
Vascular lesions affecting central nervous system	1,321	6.7	1,084	1.1
Hypertensive disease	1,193	6.1	1,387	1.4
Diabetes mellitus	536	2.7	950	.9
Coronary artery disease	517	2.6	662	.6
General arteriosclerosis	485	2.5	107	.1
Hernia, intestinal obstruction	459	2.3	1,379	1.3
Pneumonias	445	2.3	1,767	1.7
Cholelithiasis and cholecystitis	241	1.2	571	.6
Arthritis not specified as acute	216	1.1	501	.5
Selected diseases of urinary system	161	.8	609	.6
Selected circulatory diseases	154	.8	531	.5
All other diagnoses	9,416	47.9	88,519	86.5

Source: Fact Book on the Aged in New York City, table 8, p. 37.

TABLE 2.—*Washington (State) sickness survey, 1953; Diagnoses most frequently reported by doctors within older age groups* [1]

AGE GROUPS—45 TO 64 YEARS

[Accounting for 1 percent or more of visits within age group]

	Frequency	Percent of 45–64 year age group visits
Menopausal symptoms (635)	660	3.8
Arteriosclerotic heart disease, including coronary disease (420)	585	3.4
Arthritis, unspecified (725)	509	3.0
Examinations (Y00–Y05)	446	2.6
Essential benign hypertension, without mention of heart (444)	394	2.3
Refractive errors (380)	313	1.8
Acute upper respiratory infection of multiple or unspecified sites (475)	298	1.7
Asthma (241)	251	1.5
Influenza with other respiratory manifestations, and influenza unqualified (481)	245	1.4
Synovitis, bursitis, and tenosynovitis without mention of occupational origin (741)	243	1.4
Diabetes mellitus (260)	228	1.3
Sprains and strains of other and unspecified parts of back (N847)	225	1.3
Muscular rheumatism (726)	206	1.2
Other and unspecified forms of neuralgia and neuritis (366)	189	1.1
Osteoarthritis (arthrosis) and allied conditions (723)	189	1.1
Psychoneurotic disorders, other, mixed and unspecified types (318)	188	1.1
Sprains and strains of sacroiliac region (N846)	184	1.1
Other dermatitis (703)	176	1.0
Other and unspecified diseases of heart (434)	175	1.0
Other and unspecified hypertensive heart disease (443)	175	1.0
Subtotal	5,879	34.1
All other	11,327	65.9
Total	17,206	100.0

See footnote at end of table, p. 185.

TABLE 2.—*Washington (State) sickness survey, 1953; Diagnoses most frequently reported by doctors within older age proups* [1]—Continued

AGE GROUPS—65 AND OVER

	Frequency	Percent of 65 and over age group visits
Arteriosclerotic heart disease, including coronary disease (420)	559	6.1
Essential benign hypertension without mention of heart (444)	378	4.2
Other and unspecified diseases of heart (434)	362	4.0
Arthritis. unspecified (725)	303	3.3
Diabetes mellitus (260)	277	3.0
Other and unspecified hypertensive heart disease (443)	236	2.6
Hyperplasia of prostate (610)	190	2.1
Osteoarthritis (arthrosis) and allied conditions (723)	164	1.8
Anemia of unspecified type (293)	151	1.7
Cerebral hemorrhage (331)	150	1.6
General arteriosclerosis (450)	131	1.4
Pernicious and other hyperchronic anemias (290)	127	1.4
Asthma (241)	125	1.4
Cystitis (605)	115	1.3
Other myocardial degeneration (422)	110	1.2
Fracture of neck of femur (N820)	106	1.2
Cataract (385)	105	1.2
Other and ill-defined vascular lesions affecting central nervous system (334)	101	1.1
Refractive errors (380)	98	1.1
Hernia of abdominal cavity without mention of obstruction (560)	94	1.0
Examinations (Y00–Y05)	93	1.0
Subtotal	3,975	43.7
All other	5,108	56.3
Total	9,083	100.0

[1] From Standish, Seymour, Jr., et al., Why Patients See Doctors (Seattle, University of Washington Press, 1955), pp. 20, 21. Data obtained in the Washington sickness survey, conducted in 1953, in which an average of ⅓ of the State's physicians reported on all patients seen on a single day at 3-month intervals, together with their diagnosis. These reports covered 72,188 patients visited on 4 typical days.

TABLE 3.—*Queens General Hospital (New York, N. Y.) home care program—estimated number and percentage [1] of various services provided to patients by diagnostic category, calendar year 1952*

Primary diagnostic category [2]	Total patients	Number of services				
		Physician visits	Nursing visits	Physical therapy visits	Clinic visits	Housekeeping hours
Total, all diagnoses	504	3,290	12,844	1,724	168	41,236
Heart disease	114	856	3,798	86	34	7,736
Vascular lesions affecting central nervous system	34	300	1,092	362	4	11,638
Other cardiovascular disease	54	320	1,560	48	2	2,940
Malignant neoplasms	80	390	1,226	2	18	4,906
Diabetes millitus	46	206	938	132	14	----------
Arthritis and rheumatism	18	144	354	244	6	1,986
Accidents	74	378	1,558	502	34	6,574
All other diseases	84	596	2,318	348	56	5,456
	Percent					
Heart disease	22	26	30	5	20	19
Vascular lesions affecting central nervous system	7	9	8	21	2	28
Other cardiovascular disease	11	10	12	3	1	7
Malignant neoplasms	16	12	10	[3]	11	12
Diabetes mellitus	9	9	7	8	9	----------
Arthritis and rheumatism	3	4	3	14	4	5
Accidents	15	12	12	29	20	16
All other diseases	17	18	18	20	33	13
AVERAGE NUMBER VISISTS PER PATIENT						
Total, all diagnoses	----------	6.5	25.5	3.4	0.3	81.8
Heart disease	----------	7.5	33.3	.8	.3	67.9
Vascular lesions affecting central nervous system	----------	8.8	32.1	10.6	.1	342.3
Other cardiovascular disease	----------	5.9	28.9	.9	[4]	54.4
Malignant neoplasms	----------	4.9	15.4	[4]	.2	61.3
Diabetes mellitus	----------	6.7	20.4	2.9	.3	----------
Arthritis and rheumatism	----------	8.0	19.7	13.6	.3	110.3
Accidents	----------	5.1	21.1	6.8	.5	88.8
All other diseases	----------	7.1	27.6	4.1	.7	65.0

[1] Estimates are based upon a 50-percent sample of the patient master card file.
[2] Only the primary diagnosis is used. For Sixth Revision, International List numbers of diagnoses, see table 4.
[3] Less than 0.5 percent.
[4] Less than 0.05 visits.

Source: A Study of Selected Home Care Programs, Public Health Monograph No. 35, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 447 (Washington, 1956). p. 56. Of the total of 504 patients receiving home care the median age for both sexes was 64.0 years: males 63.5 years and females, 64.5 years. There were 76 patients under 45, 180 patients aged 45 to 64 and 248 aged 65 and over. Average cost per patient-day, $2.44. Average annual cost per patient served, $374.68.

TABLE 4.—*Philadelphia (Pa.) intensive home care plan—Types and number of services provided to patients, by diagnostic category, calendar year 1952*

Primary diagnostic category	Total patients receiving any services	Type of visit								Conferences
		Physician	Clinic	Medical consultant	Nurse coordinator	Nursing	Physical therapy	Occupational therapy	Speech therapy	
	Number									
All diagnoses	86	651	10	63	78	1,566	1,045	283	151	53
Heart disease (410–443)	2	43	------	2	2	31	------	------	--------	--------
Vascular lesions affecting central nervous system (330–334)	32	236	------	27	31	306	485	77	144	16
Other cardiovascular disease (400–402, 444–468, 754)	2	9	------	3	3	42	30	21	--------	2
Malignant neoplasms (140–205)	6	94	2	2	4	253	78	------	--------	--------
Diabetes mellitus (260)	4	25	1	2	3	20	59	2	--------	2
Diseases of central nervous system (except vascular lesions) (340–357, 751)	9	43	------	4	5	226	48	43	7	5
Arthritis (720–727)	14	126	6	9	13	468	226	114	--------	15
Accidents (N800–N999)	12	43	1	8	11	166	99	19	--------	7
All other specified diseases (residual)	5	32	------	6	6	54	20	7	--------	6
	Percent									
Heart disease (410–443)	2	7	------	3	2	2	------	------	--------	--------
Vascular lesions affecting central nervous system (330–334)	37	36	------	43	40	20	46	27	95	30
Other cardiovascular disease (400–402, 444–468, 754)	2	1	------	5	4	3	3	7	--------	4
Malignant neoplasms (140–205)	7	14	20	3	5	16	7	------	--------	--------
Diabetes mellitus (260)	5	4	10	3	4	1	6	1	--------	4
Diseases of central nervous system (except vascular lesions) (340–357, 751)	11	7	------	6	6	14	5	15	5	10
Arthritis (720–727)	16	19	60	14	17	30	22	40	--------	28
Accidents (N800–N999)	14	7	10	13	14	11	9	7	--------	13
All other specified diseases (residual)	6	5	------	10	8	3	2	3	--------	11

Source: A Study of Selected Home Care Programs, Public Health Monograph No. 35, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 447 (Washington, 1956), p. 84. Of 86 patients receiving home care services on the program during the calendar year 1952, 70, or about 82 percent, were 45 years of age or over, and 40 (47 percent) were 65 and over.

Average gross cost per patient-day, $2.07; average net cost per patient-day, $1.80.

Part II. Health Care Provided

Table 5.—*Percentage distribution of hospital admissions, by age, sex, and insurance status*

Age and sex	Person-years, percent			Admissions, percent		
	All persons	Insured persons	Uninsured persons	All persons	Insured persons	Uninsured persons
All persons (male and female), total [1]	8,768	4,764	4,004	1,021	666	355
Under 6 percent	12	12	12	8	8	10
6 to 17 do	21	22	20	14	16	10
18 to 34 do	22	23	22	31	30	32
35 to 54 do	27	30	23	28	30	24
55 to 64 do	9	9	9	9	10	7
65 and over do	9	5	13	10	6	17
Age unknown do	(2)	(2)	(2)			
Males, total [1]	4,246	2,312	1,934	365	241	124
Under 6 percent	13	12	13	12	11	15
6 to 17 do	22	23	21	19	22	14
18 to 34 do	21	21	22	16	15	19
35 to 54 do	27	30	23	31	34	26
55 to 64 do	9	9	8	10	12	8
65 and over do	8	5	12	11	7	19
Age unknown do	(2)	(2)	(2)			
Females, total [1]	4,552	2,452	2,070	656	425	231
Under 6 percent	18	12	11	6	6	7
6 to 17 do	20	21	20	11	12	8
18 to 34 do	23	25	22	39	40	39
35 to 54 do	26	30	23	26	28	23
55 to 64 do	9	9	10	8	9	6
65 and over do	9	4	14	9	5	16
Age unknown do	(2)	(2)	(2)			

[1] Figures equal 100 percent.
[2] Half, or less than half, of 1 percent.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 182, Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals), including 767 persons aged 65 and over.

TABLE 6.—*Hospital admission rates, exclusive of admissions for delivery, by age, sex, and insurance status*

Age and sex	Number of person-years			Nondelivery admissions per 100 person-years [1]		
	All persons [2]	Insured persons [3]	Uninsured persons [3]	All persons	Insured persons	Uninsured persons
All persons (male and female), total	8,768	4,764	4,004	10	12	7
Under 6	1,067	586	481	8	9	7
6 to 17	1,852	1,034	818	7	10	4
18 to 34	1,958	1,077	881	8	10	7
35 to 54	2,332	1,424	908	11	13	8
55 to 64	776	413	363	12	16	6
65 and over	756	217	539	13	18	11
Age unknown	27	13	14	----	----	----
Males, total	4,246	2,312	1,934	9	10	6
Under 6	532	284	248	8	10	7
6 to 17	936	527	409	8	10	4
18 to 34	908	475	433	6	7	6
35 to 54	1,136	698	438	10	12	7
55 to 64	365	203	162	10	14	6
65 and over	359	116	240	11	13	10
Age unknown	10	6	4	----	----	----
Females, total	4,522	2,452	2,070	10	13	8
Under 6	535	302	233	8	8	7
6 to 17	916	507	409	7	10	4
18 to 34	1,050	602	448	10	12	8
35 to 54	1,196	726	470	12	14	8
55 to 64	411	210	201	13	18	8
65 and over	397	98	299	15	23	13
Age unknown	17	7	10	----	----	----

[1] These bases have been adjusted for births and deaths within families to give the population exposed to risk of occurrence.

[2] An admission is classified here as covered if the patient had hospital insurance in general effect at the time of admission. Thus, the admission is classified as covered even if the patient was hospitalized for a condition which was not yet covered under his contract because of a special waiting period for that condition (e. g., deliveries, tonsillectomies, etc.). Also, the admission is classified as covered even though the patient was hospitalized for a condition which was specifically excluded under his contract (e. g., preexisting condition). Admissions to hospitals classified by the American Hospital Association as general or special long-term, mental and allied, or tuberculosis hospitals are excluded. Only admissions to hospitals classified as general or special short-term by the American Hospital Association and hospitals unlisted but not clearly long-term are included. Only admissions which occurred within our survey year are included here. Hospitalizations which began before the survey year but where the patient was still in the hospital at the beginning of the year are excluded.

[3] These bases have been adjusted for persons covered by hospital insurance for only a part of the survey year to give the appropriate insured and noninsured population exposed to risk of occurrence.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 181. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953. and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 7.—*Hospital admission rates, by age, family income, and insurance status*

Age and sex	Number of person-years			Admissions [1] per 100 person-years		
	All persons [2]	Insured persons [3]	Uninsured persons [3]	All persons	Insured persons	Uninsured persons
All persons (all ages), total	8,769	4,771	3,998	12	14	9
Under $2,000	1,373	321	1,052	12	21	9
$2,000 to $3,499	1,888	840	1,048	12	16	9
$3,500 to $4,999	2,368	1,441	927	12	13	9
$5,000 to $7,499	1,935	1,359	576	12	13	8
$7,500 and over	1,161	796	365	11	12	10
All persons under 18, total	2,919	1,620	1,299	8	10	5
Under $2,000	402	94	308	6	7	6
$2,000 to $3,499	662	293	369	10	15	5
$3,500 to $4,999	865	530	335	8	9	6
$5,000 to $7,499	646	467	179	7	8	3
$7,500 and over	333	232	101	8	9	7
All persons 18 to 54, total	4,291	2,507	1,784	14	16	11
Under $2,000	468	117	351	15	24	13
$2,000 to $3,499	896	410	486	15	18	13
$3,500 to $4,999	1,208	757	451	15	17	12
$5,000 to $7,499	1,051	755	296	14	15	8
$7,500 and over	648	461	187	12	13	9
All persons 55 and over, total	1,532	631	901	12	16	10
Under $2,000	499	109	390	13	29	8
$2,000 to $3,499	327	137	190	8	10	7
$3,500 to $4,999	290	149	141	10	10	9
$5,000 to $7,499	229	132	97	17	20	13
$7,500 and over	174	101	73	16	16	15

[1] An admission is classified here as covered if the patient had hospital insurance in general effect at the time of admission. Thus, the admission is classified as covered even if the patient was hospitalized for a condition which was not yet covered under his contract because of a special waiting period for that condition (e. g., deliveries, tonsillectomies, etc.). Also, the admission is classified as covered even though the patient was hospitalized for a condition which was specifically excluded under his contract (e. g., preexisting condition). Admissions to hospitals classified by the American Hospital Association as general or special long-term, mental and allied, or tuberculosis hospitals are excluded. Only admissions to hospitals classified as general or special short-term by the American Hospital Association and hospitals unlisted but not clearly long-term are included. Only admissions which occurred within our survey year are included here. Hospitalizations which began before the survey year but where the patient was still in the hospital at the beginning of the year are excluded.

[2] These bases have been adjusted for births and deaths within families to give the population exposed to risk of occurrence.

[3] These bases have been adjusted for persons covered by hospital insurance for only a part of the survey year to give the appropriate insured and noninsured population exposed to risk of occurrence.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 183. Data obtained from a nationwide survey of family medical costs and voluntary insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 8.—*Percentage distribution of length of hospital stay per admission,[1] by age and insurance status*

Insurance status and length of stay	Percent distribution, by age			
	All persons	Under 18	18 to 54	55 and over
All persons (insured and uninsured), total[2]	1,033	230	608	195
Under 3	28	49	24	16
3 to 5	31	22	37	23
6 to 9	21	17	22	22
10 to 19	13	8	11	24
20 or more	6	3	4	14
Days unknown	1	(3)	1	----
Insured persons, total[2]	670	157	407	106
Under 3	29	52	23	18
3 to 5	31	22	37	20
6 to 9	23	15	25	26
10 to 19	12	8	11	22
20 or more	5	3	3	14
Days unknown	(3)	----	(3)	----
Uninsured persons, total	363	73	201	89
Under 3	27	42	26	15
3 to 5	32	22	37	27
6 to 9	18	22	17	17
10 to 19	14	7	11	27
20 or more	7	5	5	15
Days unknown	2	1	2	----

[1] An admission is classified here as covered if the patient had hospital insurance in effect at the time of admission. Thus, the admission is classified as covered even if the patient was hospitalized for a condition which was not yet covered under his contract because of a special waiting period for that condition (e. g., deliveries, tonsillectomies, etc.). Also, the admission is classified as covered even though the patient was hospitalized for a condition which was specifically excluded under his contract (e. g., preexisting condition). Admissions to hospitals classified by the American Hospital Association as general or special long-term, mental and allied, or tuberculosis hospitals are excluded. Only admissions to hospitals classified as general or special short-term by the American Hospital Association and hospitals unlisted but not clearly long-term are included. This tabulation includes 12 hospital stays where the patient was actually admitted prior to the survey year but the stay extended into the survey year.

[2] Figures equal 100 percent.

[3] Half, or less than half, of 1 percent.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 186. Data obtained from a nationwide survey of family medical costs and voluntary insurance by the Health Information Foundation. The survey was conducted in July 1953 and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 9.—*Comparative distribution of aged and other patients by length of stay, New York City municipal general hospitals, May–October 1952*

Age	Total	Percent distribution by length of stay					
		Under 7 days	7 to 30 days	31 to 60 days	61 to 90 days	91 to 180 days	181 days and over
Aged	100.0	28.9	47.0	13.4	4.8	3.9	2.5
Other	100.0	50.9	37.3	6.2	2.0	1.8	1.9
Aged	100.0	32.7	46.9	12.0	3.5	3.0	1.9
Other	100.0	35.5	49.5	8.6	2.3	2.5	1.6
Aged	100.0	20.9	43.2	20.1	7.7	6.0	2.1
Other	100.0	20.0	44.2	19.8	8.5	5.8	1.7
Aged	100.0	40.8	36.3	9.9	4.5	4.4	4.1
Other	100.0	40.4	34.8	10.7	4.8	5.2	4.1
Aged	100.0	32.0	47.7	12.3	2.8	2.9	2.3
Other	100.0	34.3	50.8	9.4	1.9	2.2	1.4
Aged	100.0	22.9	45.1	15.4	6.5	6.0	4.1
Other	100.0	26.4	52.3	10.3	5.2	3.6	2.2
Aged	100.0	48.4	33.4	13.7	2.5	.8	1.2
Other	100.0	42.4	38.4	16.5	1.5	1.1	.1
Aged	100.0	23.0	38.3	14.8	7.8	7.8	8.3
Other	100.0	26.4	33.9	17.0	3.8	11.3	7.6
Aged	100.0	25.2	58.1	10.4	3.0	2.0	1.3
Other	100.0	19.5	72.9	5.6	1.0	.7	.3
Aged	100.0	24.4	58.8	10.5	1.6	2.9	1.8
Other	100.0	30.1	59.0	7.7	1.5	1.5	.2
Aged	100.0	14.5	51.9	27.0	5.0	.8	.8
Other	100.0	24.5	60.6	12.6	1.4	.9	----
Aged	100.0	17.6	52.8	11.6	4.6	5.5	7.9
Other	100.0	21.5	48.9	11.6	4.6	5.4	8.0
Aged	100.0	16.2	57.1	16.8	3.7	6.2	----
Other	100.0	28.2	59.1	8.4	2.8	1.0	.5
Aged	100.0	24.0	50.6	18.2	3.9	.7	2.6
Other	100.0	29.2	53.1	11.1	2.4	2.3	1.9
Aged	100.0	28.1	48.5	12.5	4.9	3.7	2.3
Other	100.0	54.4	35.1	5.3	1.7	1.6	1.9

Source: Fact Book on the Aged in New York City, table 8, p. 37.

TABLE 10.—*Illness, medical care, and hospitalization at all ages and at ages 65 and over, as found in the Eastern Health District of Baltimore, 1938–43; annual rates (all causes, both sexes; a disabling illness represents an illness lasting 1 day or longer)*

Duration of disabling illness	Illnesses per 1,000 persons	
	All ages	65 and over
Disabling for 1 day or more:		
All	650	546
Acute	575	305
Chronic	76	241
Temporary	66	193
Permanent	10	48
Disabling for 7 days or more:		
All	305	382
Acute	255	175
Chronic	50	207
Temporary	40	159
Permanent	10	48
Disabling for 30 days or more:		
All	71	190
Acute	40	58
Chronic	31	132
Temporary	21	85
Permanent	10	47

TABLE 10.—*Illness, medical care, and hospitalization at all ages and at ages 65 and over, as found in the Eastern Health District of Baltimore, 1938–43; annual rates (all causes, both sexes; a disabling illness represents an illness lasting 1 day or longer)*—Continued

Illness confining to house, bed, or hospital	Annual basis	
	All ages	65 and over
Illness confining to houses:		
House cases per 1,000 persons observed	595	482
Days confined to house per person observed	9.4	29.9
House days per house case	15.7	62.0
Percent of disabling cases confined to house	91.5	88.3
Bed illness (includes hospitalized illnesses):		
Bed cases per 1,000 persons observed	365	321
Days in bed per person observed	4.95	8.52
Days in bed per bed case	13.5	26.6
Percent of disabling cases in bed	56.2	58.7
Hospitalized illness: [1]		
Hospital cases per 1,000 persons observed	70.6	57.4
Hospital days per person observed	2.60	2.45
Hospital days per hospitalized case	36.9	42.7
Percent of disabling cases hospitalized	10.9	10.5
Chronic diseases:		
Individuals with 1 or more chronic illnesses per 1,000 persons observed:		
All chronic illnesses	68.7	211.3
Disabling chronic illnesses [2]	41.6	157.1
Nondisabling chronic illnesses	27.1	54.2
Percent of hospitalized cases that were chronic	23.8	70.8

Calls by physicians	Annual basis	
	All ages	65 and over
Physicians' calls per person observed:		
All cases	2.60	3.72
Disabling cases	1.86	3.09
Nondisabling cases	.74	.63
All chronic cases	.90	2.66
Disabled chronic cases	.65	2.33
Physicians' calls per attended case:		
All cases	4.42	7.58
Disabling cases	4.16	7.60
Nondisabling cases	3.70	4.49
All chronic cases	17.1	16.4
Disabled chronic cases	17.4	17.2
Cases attended by physician per 1,000 persons observed:		
All cases	589	490
Disabling cases	390	389
Nondisabling cases	199	181
All chronic cases	52.4	181.9
Disabled chronic cases	37.6	135.6
Percent of cases attended by a physician:		
All cases	42.7	40.5
Disabling cases	60.0	63.9
Nondisabling cases	27.3	21.2
All chronic cases	76.3	76.6
Disabled chronic cases	90.3	86.3
Attacks of temporarily disabling chronic illness: [3]		
Number attended by a physician per 1,000 persons	50.2	162.7
Physicians' calls per disabling attack	6.27	8.25

[1] All types of hospitalization are included, regardless of duration.
[2] These rates refer to individuals regardless of number of attacks.
[3] Excludes persons disabled throughout the period of observation.

Source: Public Health Service, Division of Public Health Methods. Illness and Health Services in an Aging Population, Publication No. 170, Washington 1952.

TABLE 11.—*Distribution of patients of the Veterans' Administration in hospitals by type, and by age, 1955*

Of the VA patients in VA and non-VA hospitals on November 30, 1954, 52.6 percent were 45 years of age or over. Among patients hospitalized with a general medical or surgical condition, 60.6 percent were in this older age group, while among tuberculosis patients, only 44.4 percent were 45 years of age or over. The most significant change since last year in the age distribution of the VA patient load is found in the increased number of patients who were 65 years of age or over. The number of these elderly patients increased from 10,478 (9.5 percent of the total patients on November 30, 1953) to 12,488 (11.2 percent of the total patients on November 30, 1954).

This increase in the number of aged in out hospital population was evident in each of the "type of patient" categories. The distribution of all VA patients in VA and non-VA hospitals by age group and type of patient is shown in the following table:

Age	Percent of VA patients remaining in hospitals, Nov. 30, 1954 (Type of patient)			
	All patients	Tuberculous	Psychiatric and neurological	General medical and surgical
18 and over	100.0	100.0	100 0	100.0
25 and over	95.5	92.5	96.4	94.9
35 and over	72.9	67.8	71.8	77.4
45 and over	52.6	44.4	50.2	60.6
55 and over	42.9	32.3	41.7	49.8
65 and over	11.2	6.6	10.0	15.3

See also vol. VI of this series, Care of the Aging Veteran by the Veterans' Administration.

Source: Veterans' Administration, *Annual Report* for fiscal year 1955 (Washington, 1956), p. 19.

TABLE 12.—*Surgical procedures per 100 person-years, by age, sex, and insurance status* [1]

Age and sex	Person-years			Surgical procedures [2] per 100 person-years		
	All persons [3]	Surgically insured persons [1 4]	Not surgically insured [1 4]	All persons	Surgically insured persons [1]	Not surgically insured [1]
All persons (male and female), total	8,768	3,903	4,865	7	9	5
Under 6	1,067	463	604	4	6	2
6 to 17	1,852	861	991	6	8	4
18 to 34	1,958	916	1,042	6	9	4
35 to 54	2,332	1,167	1,165	8	10	6
55 to 64	776	321	455	8	9	6
65 and over	756	162	594	6	6	7
Age unknown	27	13	14			
Males, total	4,246	1,912	2,334	6	7	4
Under 6	532	229	303	4	6	3
6 to 17	936	449	487	7	10	5
18 to 34	908	403	505	4	5	3
35 to 54	1,136	580	556	7	9	5
55 to 64	365	154	211	6	7	5
65 and over	359	91	268	5	4	5
Age unknown	10	6	4			
Females, total	4,522	1,991	2,531	8	10	6
Under 6	535	234	301	4	6	2
6 to 17	916	412	504	5	7	4
18 to 34	1,050	513	537	9	12	6
35 to 54	1,196	587	609	9	11	7
55 to 64	411	167	244	9	11	7
65 and over	397	71	326	8	8	8
Age unknown	17	7	10			

[1] A person is here classed as insured if the patient had surgical insurance in general effect at the time the surgical procedure was performed. Thus, the procedure is classified as insured even if no insurance benefits were received for reasons like the following: (1) waiting period for particular condition; (2) procedure not covered by particular policy (not classed as surgery by the given policy but generally considered as surgery by other policies or, more frequently, outpatient surgery when only inpatient surgery was indemnifiable under the particular policy); (3) specific exclusion (e. g., preexisting condition); (4) no charge made for the surgery (VA, charity patient, etc.) or charges covered by other 3d-party payments (workmen's compensation, public welfare, accident insurance, liability insurance, etc.).

[2] Surgical procedures are defined as any cutting procedure (including cesarean but not normal deliveries) or setting of a dislocation or fracture. Two procedures which are often classed as surgical but are not so classed here are circumcision of newborn infants and suturing of wounds.

[3] These bases have been adjusted for births and deaths within families to give the population exposed to risk of occurrence.

[4] These bases have been adjusted for persons covered by surgical insurance for only a part of the survey year to give the appropriate insured and uninsured population exposed to risk of occurrence. Owing to certain problems of data collection, it was impossible to estimate exposed surgically insured person-years solely from the survey data itself. It was necessary to combine the information obtained in the survey concerning age-sex differentials in part-year coverage of hospital insurance with Health Insurance Council estmates of the differential growth of surgical insurance as compared with hospital insurance in the total population between the end of 1951 and the end of 1953. The combination of the 2 types of data in estimating the allocation of total person-years into the insured and uninsured categories lessens somewhat the reliability of the insured-uninsured comparisons within specific age-sex groups, but it seems highly unlikely that this procedure has produced fictitious trends in the data. There can be no doubt on these grounds about the basic finding of a higher surgical rate among those covered by surgical insurance than among those not covered. The estimation procedure used does produce differences, of a negligible magnitude, in the estimates of the total surgically insured person-years (also the totals for males and females) between the present table, the rural-urban table, and the tables involving the type of insurer. These differences do not affect the estimates of surgical rates in the significant decimal places.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 193. Data obtained from a nationwide survey of family medical costs and voluntary insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

CHART 2.—WASHINGTON (STATE) SICKNESS SURVEY, 1953[1]

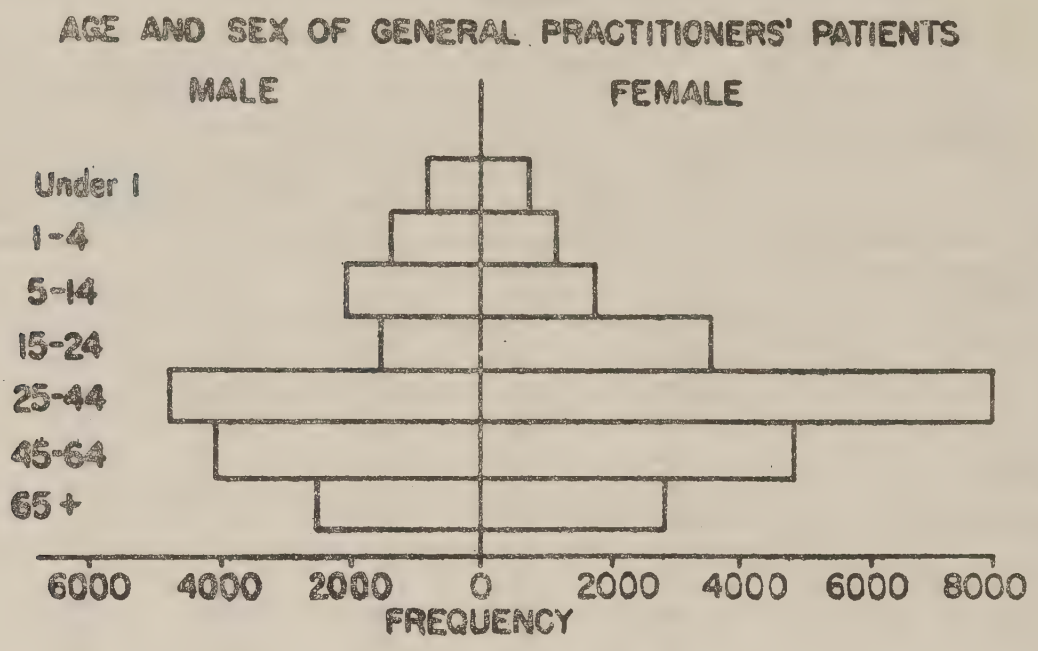
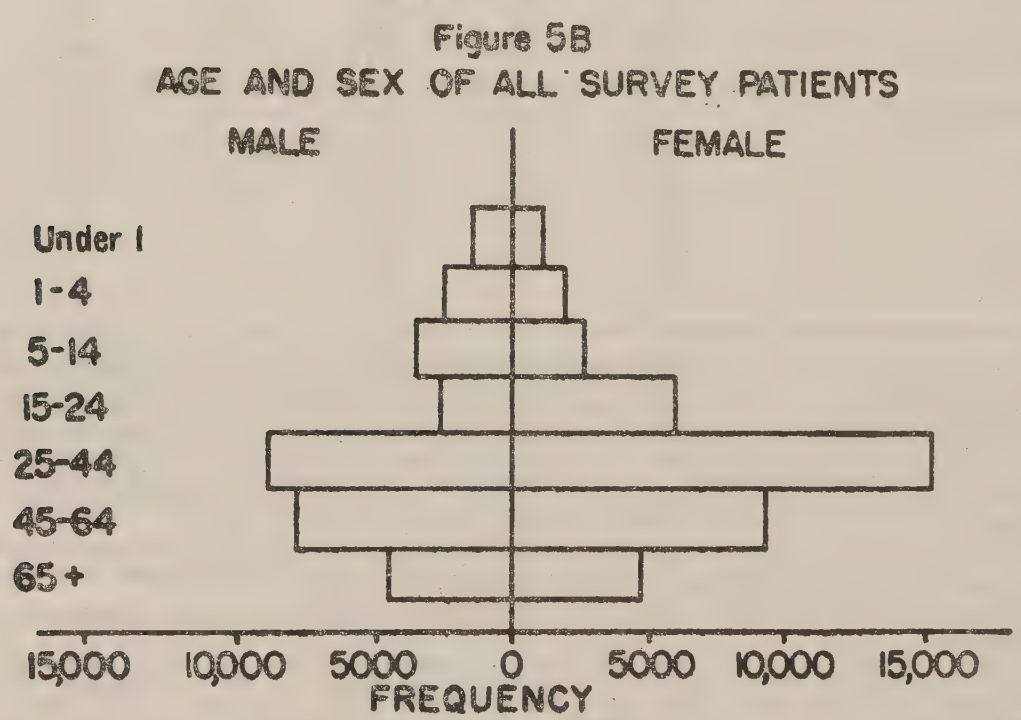


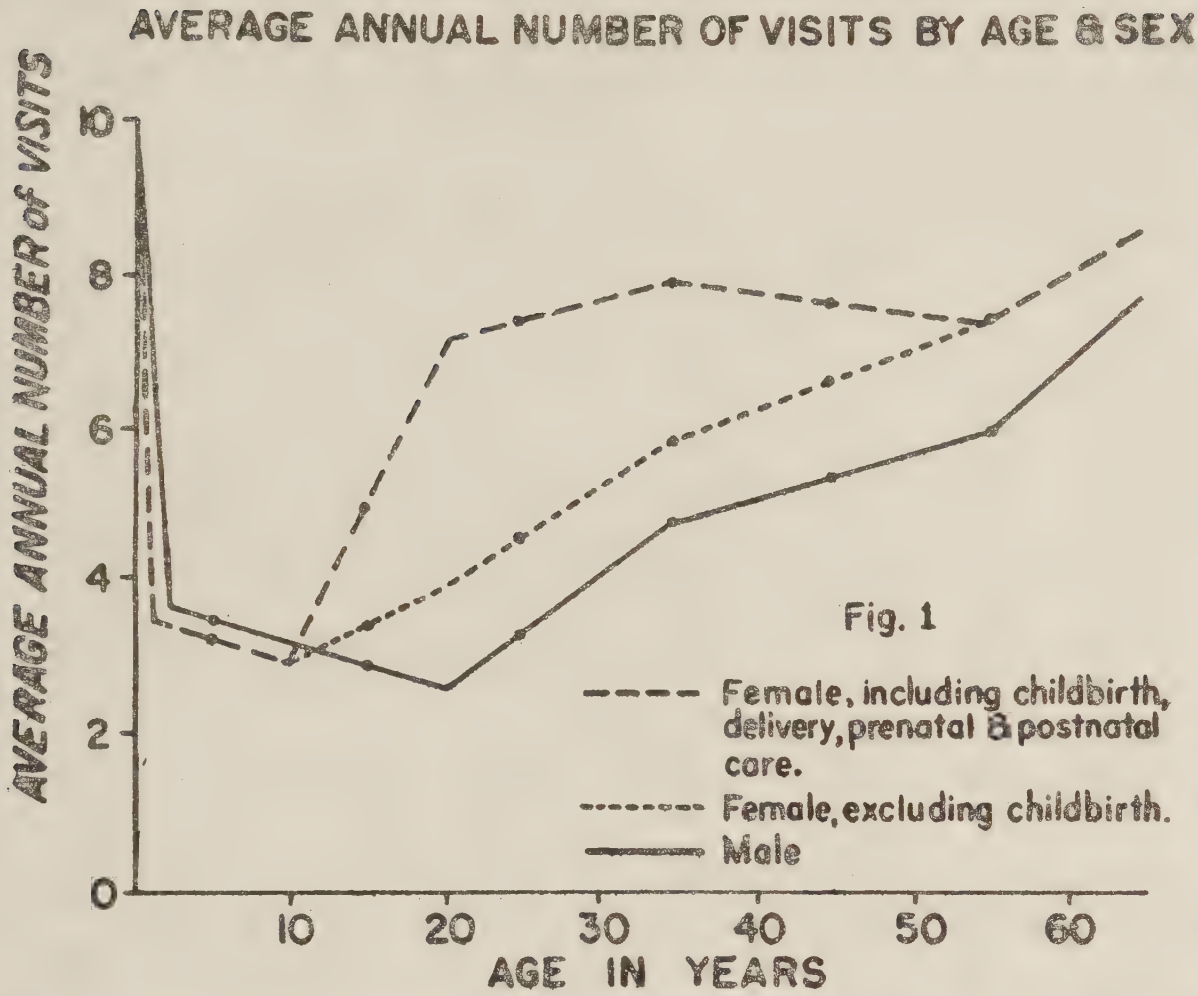
Figure 5B



In defining rural, intermediate and urban counties, census definitions were adopted. Urban counties were those with a city of 100,000 or more population. Intermediate counties were those including a city of more than 10,000 population, with at least a third of the county's population living in that city. Rural counties were all others.

[1] From Standish, Seymour, Jr., et al., Why Patients See Doctors (Seattle, University of Washington Press, 1955), p. 25. Data obtained in the Washington (State) Sickness Survey, conducted in 1953 in which an average of one-third of the State's physicians reported on all patients seen on a single day, at 3-month intervals, together with their diagnosis. These reports covered 72,188 patients visited on 4 typical days in the year.

CHART 3.—WASHINGTON (STATE) SICKNESS SURVEY, 1953[1]



[1] From Standish, Seymour, Jr., et al., Why Patients See Doctors (Seattle, University of Washington Press, 1955), p. 5. Data obtained in the Washington (State) Sickness Survey, conducted in 1953 in which an average of one-third of the State's physicians reported on all patients seen on a single day, at 3-month intervals, together with their diagnosis. These reports covered 72,188 patients visited on 4 typical days in the year.

PART III. USE OF HEALTH FACILITIES

TABLE 13.—*Total number of persons in institutions, and number and percent aged 65 and over, by type of institution, 1950*

Type of institution	Total number	Aged 65 and over	
		Number	Percent
Total	1,566,846	385,419	24.6
Homes for the aged	296,783	217,536	73.3
Public	114,250	60,424	52.9
Federal-State	41,811	14,218	34.0
Local	72,439	46,206	63.8
Private	182,533	157,112	86.1
Voluntary (nonprofit)	71,249	65,204	91.5
Proprietary (including nursing homes)	111,284	91,908	82.6
Mental hospitals	613,628	141,346	23.0
Federal	59,847	2,674	4.5
State-local	537,413	131,822	24.5
Private	16,368	6,850	41.8
Chronic-disease hospitals	20,084	8,857	44.1
Tuberculosis hospitals	76,291	6,592	8.6
Correctional institutions	264,557	5,140	1.9
All other [1]	295,503	5,948	2.0

[1] Children's institutions, homes and schools for the handicapped, and maternity homes.

Source: Social Security Bulletin, October 1953, table 3, p. 11.

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TABLE 14.—*Age distribution of all patients in hospitals by percentage in 3 service types and 6 control types of hospitals, 1953*

Code Nos.	Type of control	Age 14 and under			Ages 15 to 44			Ages 45 to 64			Age 65 and over			Total patients		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1-3	Military:															
	General	0.06	0.04	0.09	2.67	0.38	3.05	0.18	0.03	0.21	0.03	0.01	0.04	2.93	0.46	3.39
	N and M	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	Other types	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5	Veterans' Administration:															
	General	-----	-----	-----	1.69	.03	1.73	1.59	.01	1.60	.39	(1)	.39	3.67	.04	3.71
	N and M	-----	-----	-----	1.80	.05	1.85	1.89	.02	1.90	.28	.01	.29	3.97	.67	4.04
	Other types	-----	-----	-----	.36	.01	.36	.26	(1)	.27	.03	(1)	.04	.66	.01	.66
4, 6, 7	Other Federal:															
	General	.02	.03	.05	.14	.06	.20	.12	.02	.14	.03	.01	.04	.31	.12	.43
	N and M	(1)	(1)	(1)	.10	.01	.12	.03	(1)	.03	.01	(1)	.01	.15	.02	.16
	Other types	.01	.01	.01	.11	.03	.14	.04	.01	.06	.03	(1)	.03	.19	.05	.24
7a	Federal subtotal:															
	General	.08	.06	.14	4.50	.47	4.97	1.88	.07	1.94	.45	.02	.47	6.91	.62	7.53
	N and M	(1)	(1)	(1)	1.90	.06	1.96	1.92	.02	1.94	.29	.01	.30	4.12	.09	4.20
	Other types	.01	.01	.01	.47	.04	.50	.31	.01	.32	.06	(1)	.07	.85	.06	.91
	Total	.09	.07	.16	6.87	.57	7.44	4.11	.09	4.21	.81	.03	.84	11.88	.76	12.64
8	State:															
	General	.12	.09	.22	.17	.29	.46	.27	.18	.45	.16	.11	.27	.73	.67	1.40
	N and M	1.16	.85	2.01	8.02	7.76	15.78	7.02	7.55	14.78	4.36	5.05	9.41	20.56	21.22	41.78
	Other types	.10	.09	.19	.70	.63	1.33	.66	.23	.89	.27	.14	.40	1.72	1.09	2.81
9, 11	Local government:															
	General	.41	.31	.72	.76	1.48	2.23	.86	.70	1.57	.92	.79	1.71	2.95	3.28	6.23
	N and M	.02	.01	.04	.13	.13	.26	.17	.18	.34	.16	.17	.32	.48	.48	.96
	Other types	.10	.09	.18	.68	.64	1.32	.92	.33	1.25	.80	.43	1.23	2.49	1.49	3.98
11a	Other governmental subtotal:															
	General	.54	.40	.94	.93	1.77	2.70	1.13	.89	2.02	1.08	.90	1.98	3.67	3.95	7.63
	N and M	1.18	.86	2.05	8.15	7.89	16.05	7.19	7.73	14.92	4.51	5.22	9.73	21.03	21.71	42.74
	Other types	.20	.18	.38	1.37	1.27	2.65	1.57	.56	2.13	1.06	.57	1.63	4.21	2.58	6.79
	Total	1.92	1.45	3.36	10.45	10.93	21.39	9.89	9.18	19.07	6.65	6.69	13.34	28.92	28.24	57.15
12-16	Nongovernmental:															
	General	1.75	1.37	3.12	3.15	7.61	10.76	3.23	3.74	6.98	2.35	2.66	5.01	10.49	15.38	25.86
	N and M	.03	.03	.07	.20	.29	.48	.13	.23	.35	.13	.26	.38	.48	.81	1.29
	Other types	.46	.40	.86	.31	.49	.80	.32	.20	.53	.36	.50	.87	1.46	1.60	3.06
16a	Nongovernmental subtotal	2.25	1.79	4.04	3.66	8.40	12.05	3.68	4.18	7.86	2.84	3.42	6.26	12.43	17.78	30.21
	Total [1]	4.25	3.31	7.56	20.98	19.89	40.87	17.69	13.45	31.13	10.30	10.14	20.44	53.22	46.78	100.00

[1] Because these percentages, unlike those in all other tables, are shown to 2 decimal places, no percentages herein are forced. Hence, a few of the percentages in the bottom row and in the last column deviate very slightly from comparable percentages carried to 1 decimal place in other tables.

Source: Frank G. Dickinson, Age and Sex Distribution of Hospital Patients, Bulletin 97, Bureau of Medical Economic Research, American Medical Association (Chicago, 1955), p. 23.

TABLE 15.—*Patients 65 and over in all hospitals [1] per 10,000 State population 65 and over, 1953*

State	Number of patients 65 and over	Patients 65 and over per 10,000 persons 65 and over [2]		State	Number of patients 65 and over	Patients 65 and over per 10,000 persons 65 and over [2]	
		Number	Rank			Number	Rank
Alabama	814	39.1	48	Nevada	306	235.4	12
Arizona	747	146.5	30	New Hampshire	1,463	252.2	7
Arkansas	1,909	120.1	41	New Jersey	7,106	159.7	27
California	22,634	232.6	14	New Mexico	504	136.2	36
Colorado	3,394	269.4	6	New York	39,482	283.6	3
Connecticut	4,927	243.9	10	North Carolina	3,129	128.2	39
Delaware	1,008	360.0	1	North Dakota	1,391	272.7	4
Dlorida	3,291	121.4	40	Ohio	13,348	172.2	24
Georgia	1,267	53.7	46	Oklahoma	3,044	149.2	29
Idaho	698	145.4	31	Oregon	1,962	131.7	38
Illinois	20,052	240.1	11	Pennsylvania	16,781	175.9	22
Indiana	5,447	142.2	33	Rhode Island	1,490	198.7	19
Iowa	3,762	134.4	37	South Carolina	616	50.1	47
Kansas	3,467	169.1	25	South Dakota	1,447	245.3	9
Kentucky	4,670	195.4	21	Tennessee	2,169	88.5	43
Louisiana	2,723	141.1	34	Texas	4.696	81.4	44
Maine	1,634	173.8	23	Utah	1,276	271.5	5
Maryland	4,403	251.6	8	Vermont	412	105.6	42
Massachusetts	10,104	197.0	20	Virginia	3,313	144.7	32
Michigan	8,750	167.3	26	Washington	4,681	201.8	18
Minnesota	8,710	299.3	2	West Virginia	2,170	155.0	28
Mississippi	1,016	66.0	45	Wisconsin	7,439	222.7	15
Missouri	5,961	137.7	35	Wyoming	491	233.8	13
Montana	1,248	218.9	16	District of Columbia	1,240	193.8	------
Nebraska	3,049	216.2	17				

[1] The 6,539 hospitals included are those that are registered by the American Medical Association and replied to special questions in their annual census of registered hospitals. See table 38 for data on 301 nonreplying hospitals.

[2] For State population 65 years and over in 1953, see table 1.

Source: A special tabulation by the American Medical Association from their recent survey, Age and Sex Distribution of Hospital Patients, op cit., as printed in the Council of State Governments, the States and Their Older Citizens (Chicago, 1955), p. 150.

TABLE 16.—*Persons 65 and over in institutions other than general hospitals, by State, 1950*

State	Total institutional population 65 and over			Institutional population 65 and over per 10,000 total population 65 and over	
	Total	Male	Female	Number	Rank
United States	385,219	175,264	210,461	314	------
Alabama	1,948	925	1,023	98	48
Arizona	959	578	381	216	33
Arkansas	1,870	978	892	125	45
California	29,945	13,703	16,242	334	16
Colorado	4,094	1,903	2,186	354	12
Connecticut	8,525	3,602	4,923	482	2
Delaware	1,077	483	594	409	5
Florida	4,095	2,284	1,811	172	37
Georgia	3,717	1,579	2,138	169	39
Idaho	1,061	617	444	243	30
Illinois	28,128	12,720	15,408	372	11
Indiana	10,142	4,710	5,432	280	27
Iowa	8,836	4,066	4,770	323	21
Kansas	5,154	2,343	2,811	283	25
Kentucky	4,417	2,056	2,361	187	35
Louisiana	2,748	1,205	1,543	155	41
Maine	2,634	1,176	1,458	281	26
Maryland	6,375	2,327	4,048	389	8
Massachusetts	22,406	8,978	13,428	478	3
Michigan	15,434	7,662	7,772	334	16
Minnesota	10,101	5,002	5,099	375	10
Mississippi	1,545	842	703	101	47
Missouri	11,590	4,756	6,834	284	24
Montana	1,321	801	520	259	28
Nebraska	4,559	2,008	2,551	349	13
Nevada	257	186	71	233	31
New Hampshire	2,808	1,175	1,633	485	1
New Jersey	13,024	5,324	7,700	330	19
New Mexico	383	243	140	115	46
New York	58,006	25,096	32,910	460	4
North Carolina	3,590	1,628	1,962	159	40
North Dakota	1,886	1,082	804	391	7
Ohio	23,541	11,553	11,988	332	18
Oklahoma	2,988	1,510	1,478	154	42
Oregon	4,481	2,197	2,284	321	22
Pennsylvania	29,669	12,519	17,150	334	16
Rhode Island	2,371	880	1,491	336	14
South Carolina	1,670	675	995	145	44
South Dakota	1,769	982	787	319	23
Tennessee	4,244	2,017	2,227	180	36
Texas	7,783	3,626	4,157	151	43
Utah	810	396	414	190	34
Vermont	1,289	462	827	326	20
Virginia	5,331	2,549	2,782	248	29
Washington	8,583	4,341	4,242	405	6
West Virginia	2,355	1,343	1,012	170	38
Wisconsin	11,721	5,921	5,800	378	9
Wyoming	413	257	156	227	32
District of Columbia	3,766	1,993	1,773	664	------

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, vol. IV, Special Reports, pt. 2, ch. C, Institutional Population, U. S. Government Printing Office, Washington, D. C., 1953, as printed in The Council of State Governments, The States and Their Older Citizens (Chicago, 1955), p. 147.

TABLE 17.—*Patients 65 years and over reported in general and mental hospitals by type of control, by State, 1953* [1]

State and type of hospital	Number of patients 65 years and over by type of control						Total patients 65 and over reported	Total patients reported	Percent of total patients 65 and over	Patients 65 and over per 10,000 population 65 and over	Total patients per 10,000 total population
	Federal	State	County	City	City-county	Private [2]					
Alabama:											
General	41	49	29	12	64	417	612	5,507	11.1	29.4	17.9
Mental	142	(3)	------	------	------	12	154	3,005	------	------	------
Arizona:											
General	45	------	150	48	------	138	381	2,634	14.5	74.7	28.9
Mental	------	(3)	------	------	------	------	(3)	1,683	------	------	------
Arkansas:											
General	191	30	30	65	------	307	623	5,413	11.5	39.2	28.7
Mental	148	892	------	------	------	------	1,040	6,713	15.5	65.4	35.5
California:											
General	666	35	4,615	22	------	2,542	7,880	38,242	20.6	81.0	32.5
Mental	443	9,285	(3)	------	------	819	10,547	40,299	------	------	------
Colorado:											
General	99	50	96	18	107	833	1,203	7,468	16.1	95.5	54.1
Mental	29	1,993	------	------	------	93	2,115	7,485	28.3	167.9	54.2
Connecticut:											
General	50	------	------	61	------	1,232	1,343	6,545	20.5	66.5	30.4
Mental	------	3,009	------	------	------	200	3,209	12,663	25.3	158.9	58.8
Delaware:											
General	28	------	------	------	------	137	165	996	16.6	58.9	28.1
Mental	------	474	------	------	------	------	474	1,881	25.2	169.3	53.1
Florida:											
General	188	5	353	194	11	822	1,573	8,716	18.1	58.0	26.8
Mental	------	1,447	------	------	------	49	1,496	7,656	19.5	55.2	23.5
Georgia:											
General	79	------	147	94	195	359	874	7,024	12.4	37.0	20.0
Mental	80	(3)	------	------	------	54	134	2,347	------	------	------
Idaho:											
General	25	------	33	4	7	186	255	1,270	20.1	53.1	21.2
Mental	------	432	------	------	------	------	432	2,029	21.3	90.0	33.9
Illinois:											
General	262	39	101	220	21	6,160	6,803	36,320	18.7	81.5	40.6
Mental	175	10,216	------	------	------	193	10,584	44,500	23.8	126.8	49.7
Indiana:											
General	74	39	443	29	------	1,180	1,765	9,255	19.1	46.1	22.5
Mental	86	3,246	------	------	------	93	3,425	17,021	20.1	89.4	41.4
Iowa:											
General	100	208	119	67	------	1,536	2,030	7,035	23.4	72.5	27.0
Mental	159	1,279	(3)	------	------	205	1,643	7,623	------	------	------
Kansas:											
General	204	89	210	114	14	1,007	1,638	6,008	27.3	79.9	30.6
Mental	69	1,613	------	------	------	------	1,682	7,088	23.7	82.0	36.1
Kentucky:											
General	72	------	65	35	113	2,474	2,759	6,519	13.6	37.0	22.6
Mental	39	1,695	------	------	------	62	1,796	10,705	16.8	75.1	37.1
Louisiana:											
General	104	483	2	2	------	500	1,091	8,602	12.7	56.5	30.3
Mental	------	1,420	------	------	------	92	1,512	8,876	17.0	78.3	31.3
Maine:											
General	------	------	------	91	------	463	554	2,137	25.9	58.9	23.7
Mental	77	913	------	------	------	9	999	5,226	19.1	106.3	57.9
Maryland:											
General	137	72	45	541	26	740	1,561	9,238	16.9	89.2	37.5
Mental	158	1,783	------	------	------	183	2,124	10,545	20.1	121.4	42.8
Massachusetts:											
General	93	260	------	1,253	------	2,461	4,067	18,377	22.1	79.3	37.9
Mental	266	4,736	------	------	------	278	5,280	22,887	23.1	102.9	47.3
Michigan:											
General	142	104	178	314	------	1,990	2,728	16,895	16.2	52.2	24.7
Mental	10	4,739	6	------	------	236	4,991	29,634	16.8	95.4	43.3
Minnesota:											
General	96	108	57	392	190	1,876	2,719	10,442	26.0	93.4	34.2
Mental	141	5,062	------	------	------	14	5,217	17,136	30.4	179.3	56.2
Mississippi:											
General	64	31	92	14	52	253	506	3,432	14.7	32.9	15.9
Mental	112	392	------	------	------	4	508	5,142	9.9	33.0	23.8
Missouri:											
General	92	6	77	696	------	1,752	2,623	12,099	21.7	60.6	29.8
Mental	------	2,434	------	------	------	231	2,665	13,298	20.0	61.5	32.8
Montana:											
General	44	------	88	------	------	537	669	2,221	30.1	117.4	36.5
Mental	------	526	------	------	------	------	526	1,911	27.5	92.3	31.4

See footnotes at end of table, p. 203.

TABLE 17.—*Patients 65 years and over reported in general and mental hospitals by type of control, by State, 1953* [1]—Continued

State and type of hospital	Number of patients 65 years and over by type of control						Total patients 65 and over reported	Total patients reported	Percent of total patients 65 and over	Patients 65 and over per 10,000 population 65 and over	Total patients per 10,000 total population
	Federal	State	County	City	City-county	Private [2]					
Nebraska:											
General	79	50	105	55	------	851	1,140	6,598	17.3	80.9	49.2
Mental	------	1,727	------	------	------	65	1,792	6,759	26.5	127.1	50.4
Nevada:											
General	16	--------	141	------	------	22	179	710	25.2	137.7	35.7
Mental	------	127	------	------	------	--------	127	408	31.1	97.7	20.5
New Hampshire:											
General	17	--------	45	10	------	439	511	1,768	28.9	88.1	33.8
Mental	------	919	------	------	------	--------	919	3,312	27.8	158.4	63.3
New Jersey:											
General	69	--------	236	351	------	1,838	2,494	12,967	19.2	56.0	25.6
Mental	131	3,693	399	------	------	74	4,297	19,701	21.8	96.6	38.9
New Mexico:											
General	31	4	16	6	7	104	170	1,814	16.4	50.1	24.8
Mental	------	186	------	------	------	7	193	1,419	13.6	52.2	19.4
New York:											
General	614	--------	994	2,065	------	6,464	10,137	47,046	21.6	72.8	31.0
Mental	358	20,098	------	------	------	478	20,934	96,507	21.7	150.4	63.6
North Carolina:											
General	21	29	293	65	26	923	1,357	12,488	10.9	55.6	30.5
Mental	2	1,426	------	------	------	75	1,503	11,474	13.1	61.6	28.0
North Dakota:											
General	32	--------	------	56	------	649	737	4,135	17.8	144.5	66.7
Mental	------	624	------	------	------	--------	624	3,216	19.4	122.4	51.9
Ohio:											
General	143	80	206	294	21	3,474	4,218	21,333	19.8	54.4	25.6
Mental	16	7,544	------	------	------	167	7,727	32,430	23.8	99.7	38.8
Oklahoma:											
General	79	89	41	211	------	662	1,082	5,788	18.7	53.0	26.1
Mental	------	1,864	------	------	------	10	1,874	9,708	19.3	91.9	43.8
Oregon:											
General	56	117	34	4	------	645	856	4,026	21.3	57.4	25.2
Mental	82	826	------	------	------	129	1,037	3,797	27.3	69.6	23.8
Pennsylvania:											
General	163	272	------	420	------	5,358	6,213	33,255	18.7	65.1	31.3
Mental	125	7,906	------	------	------	310	8,341	39,294	21.2	87.4	37.0
Rhode Island:											
General	38	541	------	------	------	381	960	3,109	30.9	128.0	39.9
Mental	------	366	------	------	------	66	432	2,529	17.1	57.6	32.4
South Carolina:											
General	37	--------	163	26	52	282	560	5,195	10.8	45.5	24.4
Mental	------	(3)	------	------	------	21	21	28	------	------	------
South Dakota:											
General	90	--------	9	25	------	494	618	2,325	26.6	104.7	35.8
Mental	105	689	------	------	------	--------	794	3,267	24.3	134.6	50.3
Tennessee:											
General	166	--------	72	119	18	698	1,073	8,479	12.7	43.8	25.6
Mental	55	523	285	------	------	30	893	5,397	16.6	36.4	16.3
Texas:											
General	318	83	319	90	161	1,894	2,865	24,019	11.9	49.7	29.7
Mental	194	1,038	------	------	------	45	1,277	12,314	10.6	22.1	15.0
Utah:											
General	18	--------	696	5	8	150	877	4,636	18.9	186.6	63.4
Mental	25	371	------	------	------	--------	396	2,521	15.7	84.3	34.5
Vermont:											
General	17	--------	------	------	------	240	257	1,226	21.0	65.9	32.7
Mental	------	(3)	------	------	------	130	130	487	------	------	------
Virginia:											
General	152	174	1	46	1	796	1,170	11,013	10.6	51.1	32.9
Mental	92	1,899	------	------	------	13	2,004	12,459	16.1	87.5	37.2

See footnotes at end of table, p. 203.

TABLE 17.—*Patients 65 years and over reported in general and mental hospitals by type of control, by State, 1953* [1]—Continued

State and type of hospital	Number of patients 65 years and over by type of control						Total patients 65 and over reported	Total patients reported	Percent of total patients 65 and over	Patients 65 and over per 10,000 population 65 and over	Total patients per 10,000 total population
	Federal	State	County	City	City-county	Private [2]					
Washington:											
General	188	46	388	------	3	1,010	1,635	7,638	21.4	70.5	31.8
Mental	91	2,518	------	------	------	17	2,626	8,257	31.8	113.2	34.4
West Virginia:											
General	131	17	26	75	------	717	966	5,916	16.3	69.0	30.5
Mental	------	1,040	------	------	------	--------	1,040	4,022	25.9	74.3	20.8
Wisconsin:											
General	215	114	345	85	13	2,142	2,914	12,009	24.3	87.2	34.2
Mental	99	310	3,219	------	------	169	3,797	15,381	24.7	113.7	43.8
Wyoming:											
General	20	--------	67	------	------	75	162	906	17.9	77.1	30.7
Mental	106	219	------	------	------	--------	325	1,715	19.0	154.8	58.1
District of Columbia:											
General	80	--------	------	99	------	286	465	3,311	14.0	72.7	41.4
Mental	(3)	--------	------	------	------	--------	--------	71	------	------	------

[1] The 5,448 hospitals included are those that are registered by the American Medical Association and that replied to special questions in their annual census of registered hospitals. Because age data for nonreplying hospitals was not available by State, patients are probably underreported in certain States.
[2] Refers to all nongovernmental hospitals regardless of type of business organization.
[3] Information not available.

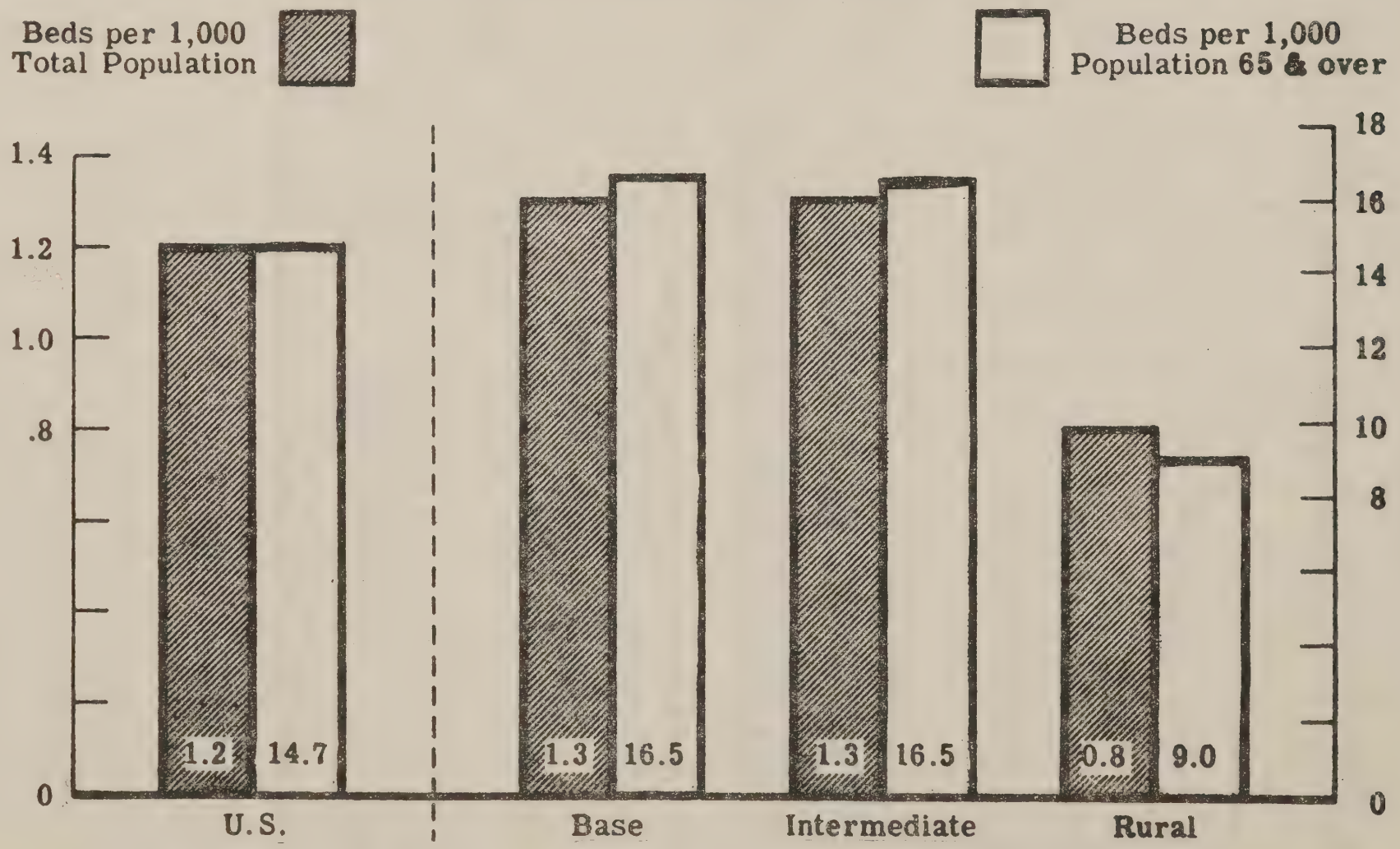
Source: Unpublished special State tabulation from study reported in Age and Sex Distribution of Hospital Patients, Bull. 97, Bureau of Medical Economic Research, American Medical Association, 1954, as printed in the Council of State Governments, The States and Their Older Citizens (Chicago, 1955), pp 151–153.

TABLE 18.—*Distribution of population 65 years and over, by type of general hospital service area, 1950* [1]

Type of area	Total population	Population 65 years and over		Percentage distribution	
		Number	Percent of total	Total population	Population 65 years and over [1]
Total	150,697,361	12,269,537	8.1	100.0	100.0
Base	62,406,263	4,866,499	7.8	41.4	39.7
Intermediate	54,626,190	4,455,401	8.2	36.2	36.3
Rural	33,664,908	2,947,637	8.8	22.3	24.0

[1] Significantly different from distribution of the total population, by the chi-square test ($P<.001$).

CHART 4.—SKILLED NURSING HOME BEDS IN RELATION TO TOTAL AND AGED POPULATION, BY TYPE OF GENERAL HOSPITAL SERVICE AREA



Source: General Hospitals and Nursing Homes. Public Health Monograph No. 44, U. S. Deapartment of Health, Education, and Welfare, Public Health Service Publication No. 492 (Washington, 1956), p. 20. A hospital service area takes into account factors which include size and distribution of population, geographic contours, transportation facilities, general trade patterns, and hospital utilization practices. Most States follow county lines with a single county or a combination of counties making up an area.

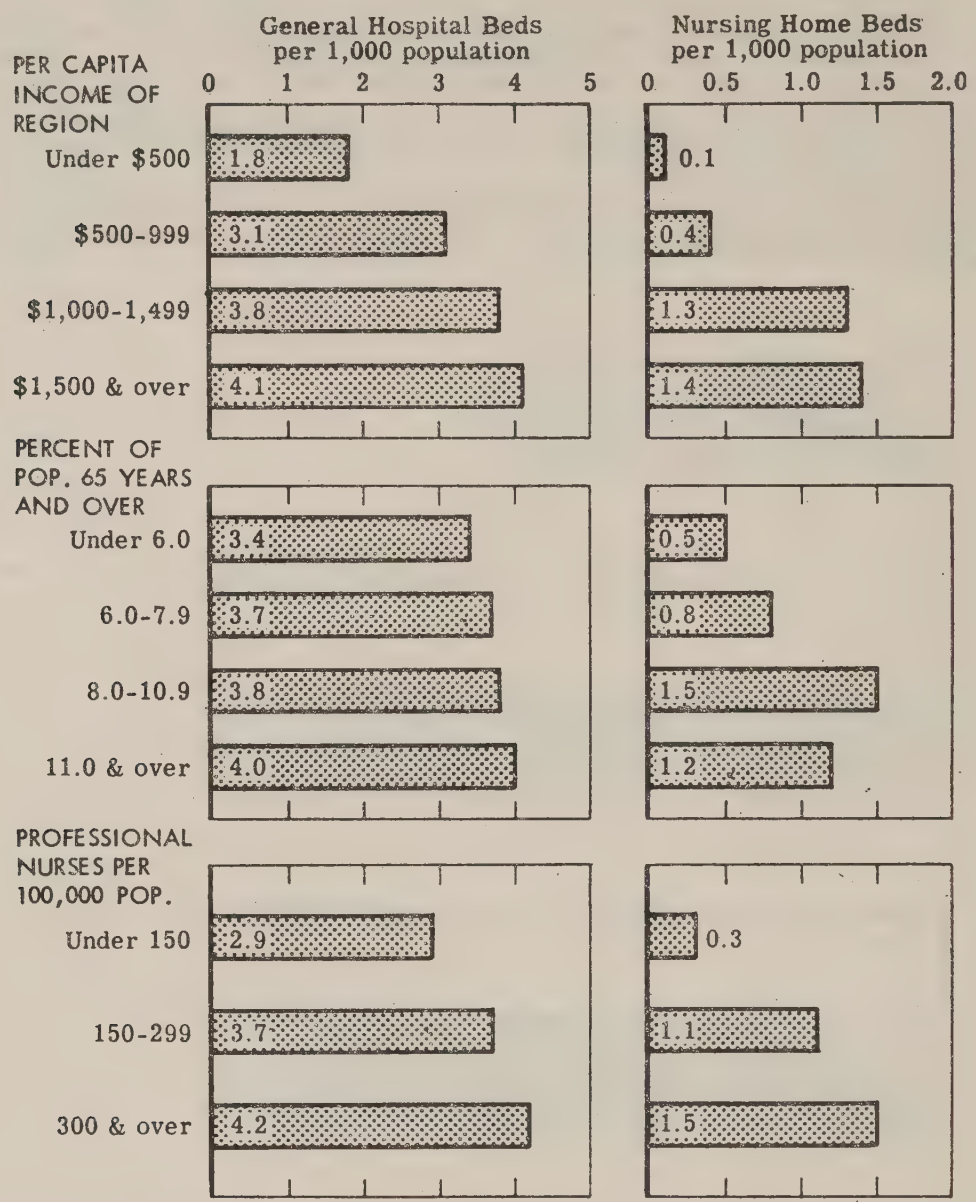
Base areas must contain a teaching hospital of a medical school suitable for use as a base hospital in a coordinated hospital system, or have a total population of at least 100,000 and have, on completion of the hospital construction program, at least 1 general hospital with at least 200 beds furnishing internships and residencies in 2 or more specialties.

Intermediate areas must have a population of at least 25,000 and contain, on completion of the hospital construction program, at least 1 general hospital which has 100 or more beds and would be suitable for a base hospital in a coordinated hospital system.

Rural areas make up all other general hospital service areas which are developed by the State agencies.

Of the total of 1,932 general hospital service areas, 112 are base areas (serving 41 percent of the population), 566 are intermediate areas (serving 36 percent of the population), and 1,254 are rural areas (serving 22 percent of the population).

CHART 5.—AVERAGE AVAILABILITY OF GENERAL HOSPITAL AND SKILLED NURSING HOME BEDS AMONG GENERAL HOSPITAL SERVICE REGIONS, WITH DIFFERENT SOCIOECONOMIC CHARACTERISTICS



Source: General Hospitals and Nursing Homes. Public Health Monograph No. 44, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 492 (Washington, 1956), p. 32.

A general hospital service region consists of 2 or more general hospital service areas either having or anticipating 2 or more hospitals capable of working together to provide better patient care. A general hospital service area takes into account factors which include size and distribution of population, geographic contours, transportation facilities, general trade patterns, and hospital utilization practices. There are 1,932 general hospital areas in the country and making up 379 hospital service regions.

TABLE 19.—*Distribution of general hospital and skilled nursing home beds, by per capita income of general hospital service area by type of area, 1953–54*

Per capita income of area, 1950	Total population, 1950	Number of beds		Beds per 1,000 population	
		General hospitals	Nursing homes	General hospitals	Nursing homes [1]
All areas	150,697,361	564,826	171,106	3.7	1.2
Less than $500	2,966,957	4,923	353	1.7	.1
$500 to $999	30,303,810	80,878	14,356	2.7	.5
$1,000 to $1,499	61,923,327	236,935	80,500	3.8	1.3
$1,500 and over	55,503,267	242,090	75,897	4.4	1.4
Base areas	62,406,263	278,302	76,071	4.5	1.3
$500 to $999	435,925	2,045	319	4.7	.7
$1,000 to $1,499	16,156,666	71,784	15,632	4.4	1.0
$1,500 and over	45,813,672	204,473	60,120	4.5	1.3
Intermediate areas	54,626,190	194,801	69,884	3.6	1.3
Less than $500	433,911	769	0	1.8	.0
$500 to $999	11,808,398	34,627	5,023	2.9	.4
$1,000 to $1,499	33,105,624	123,431	49,530	3.7	1.5
$1,500 and over	9,278,257	35,974	15,331	3.9	1.7
Rural areas	33,664,908	91,723	25,151	2.7	.8
Less than $500	2,533,046	4,154	353	1.6	.1
$500 to $999	18,059,487	44,206	9,014	2.4	.5
$1,000 to $1,499	12,661,037	41,720	15,338	3.3	1.2
$1,500 and over	411,338	1,643	446	4.0	1.1

[1] Bed ratios for national, base, intermediate, and rural totals are computed on estimated total number of beds (of table 3) rather than on actually reported beds as shown here.

Source: General Hospitals and Nursing Homes, Public Health Monograph No. 44, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 492 (Washington, 1956), p. 26.

TABLE 20. *Distribution ofgeneral hospital service areas of each type, by relative availability of general hospital beds and percentage of population 65 years and over*

General hospital beds for 1,000 population in area, 1953	Number of areas										
	Total	Percent of population 65 years and over, 1950									
		Less to 5.0	5.0 to 5.9	6.0 to 6.9	7.0 to 7.9	8.0 to 8.9	9.0 to 9.9	10.0 to 10.9	11.0 to 11.9	12.0 to 13.9	14.0 and over
All areas											
Total	1,932	103	157	252	264	293	268	263	177	126	29
None	79	2	14	12	17	11	10	6	4	1	2
Less than 1.0	49	1	4	9	5	10	3	8	4	3	2
1.0 to 1.9	291	21	23	46	42	44	32	37	26	16	4
2.0 to 2.9	511	31	45	76	63	62	69	67	53	36	9
3.0 to 3.9	444	26	24	50	70	65	57	64	42	39	7
4.0 to 4.9	278	12	19	33	34	46	51	39	24	16	4
5.0 to 5.9	153	5	19	13	18	33	24	21	12	7	1
6.0 to 6.9	49	0	4	2	7	5	10	12	7	2	0
7.0 and over	78	5	5	11	8	17	12	9	5	6	0
Base areas											
Total	112	6	15	19	22	21	16	7	3	3	0
None	0	0	0	0	0	0	0	0	0	0	0
Less than 1.0	0	0	0	0	0	0	0	0	0	0	0
1.0 to 1.9	0	0	0	0	0	0	0	0	0	0	0
2.0 to 2.9	6	0	1	2	1	0	1	1	0	0	0
3.0 to 3.9	32	3	4	4	7	6	6	0	1	1	0
4.0 to 4.9	40	1	3	9	10	6	4	5	1	1	0
5.0 to 5.9	16	2	4	1	2	5	0	1	0	1	0
6.0 to 6.9	5	0	0	0	2	1	2	0	0	0	0
7.0 and over	13	0	3	3	0	3	3	0	1	0	0
Intermediate areas											
Total	566	34	56	73	67	96	88	76	51	21	4
None	3	0	0	0	0	0	0	2	0	0	1
Less than 1.0	3	0	1	2	0	0	0	0	0	0	0
1.0 to 1.9	45	6	8	5	5	9	1	6	3	2	0
2.0 to 2.9	144	12	25	27	18	15	19	10	14	3	1
3.0 to 3.9	145	10	6	16	20	27	23	21	14	8	0
4.0 to 4.9	126	5	9	13	12	22	29	18	12	5	1
5.0 to 5.9	61	0	6	6	7	13	10	11	5	2	1
6.0 to 6.9	14	0	1	0	2	3	3	4	1	0	0
7.0 and over	25	1	0	4	3	7	3	4	2	1	0
Rural areas											
Total	1,254	63	86	160	175	176	164	180	123	102	25
None	76	2	14	12	17	11	10	4	4	1	1
Less than 1.0	46	1	3	7	5	10	3	8	4	3	2
1.0 to 1.9	246	15	15	41	37	35	31	31	23	14	4
2.0 to 2.9	361	19	19	47	44	47	49	56	39	33	8
3.0 to 3.9	267	13	14	30	43	32	28	43	27	30	7
4.0 to 4.9	112	6	7	11	12	18	18	16	11	10	3
5.0 to 5.9	76	3	9	6	9	15	14	9	7	4	0
6.0 to 6.9	30	0	3	2	3	1	5	8	6	2	0
7.0 and over	40	4	2	4	5	7	6	5	2	5	0

Source: General Hospitals and Nursing Homes, Public Health Monograph No. 44, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 492 (Washington, 1956), p. 43. A hospital service area takes into account factors which include size and distribution of population, geographic contours, transportation facilities, general trade patterns and hospital utilization practices. Most States follow county lines with a single county or a combination of counties making up an area.

Base areas must contain a teaching hospital of a medical school suitable for use as a base hospital in a coordinated hospital system, or have a total population of at least 100,000 and have, on completion of the hospital construction program, at least 1 general hospital with at least 200 beds furnishing internships and residencies in 2 or more specialties.

Intermediate areas must have a population of at least 25,000 and contain, on completion of the hospital construction program, at least 1 general hospital which has 100 or more beds and would be suitable for a base hospital in a coordinated hospital system.

Rural areas make up all other general hospital service areas which are developed by the State agencies.

Of the total of 1,932 general hospital service areas, 112 are base areas (serving 41 percent of the population), 566 are intermediate areas (serving 36 percent of the population), and 1,254 are rural areas (serving 22 percent of the population).

TABLE 21.—*Distribution of general hospital service areas of each type, by relative availability of skilled nursing home beds and percentage of population 65 years and over*

Skilled nursing home beds per 1,000 population in area, 1954	Number of areas										
	Total	Percent of population 65 years and over, 1950									
		Less than 5.0	5.0 to 5.9	6.0 to 6.9	7.0 to 7.9	8.0 to 8.9	9.0 to 9.9	10.0 to 10.9	11.0 to 11.9	12.0 to 13.9	14.0 and over
	All areas										
Total	1,932	103	157	252	264	293	268	263	177	126	29
None	964	75	112	177	164	142	105	91	46	42	10
Less than 0.5	162	12	23	21	21	26	22	18	10	8	1
0.5 to 0.9	190	12	7	15	21	37	33	25	23	15	2
1.0 to 1.4	164	2	8	17	27	30	26	24	14	11	5
1.5 to 1.9	125	1	3	9	8	20	24	30	18	10	2
2.0 to 2.4	88	0	2	5	8	19	17	16	13	5	3
2.5 to 2.9	70	0	1	2	11	5	13	22	10	5	1
3.0 to 3.9	85	1	1	4	1	6	17	15	23	14	3
4.0 to 4.9	51	0	0	1	3	5	5	16	8	12	1
5.0 and over	30	0	0	0	0	3	6	6	11	3	1
Unknown	3	0	0	1	0	0	0	0	1	1	0
	Base areas										
Total	112	6	15	19	22	21	16	7	3	3	0
None	15	2	6	1	2	2	0	1	0	1	0
Less than 0.5	21	2	5	6	5	1	0	0	1	1	0
0.5 to 0.9	15	2	0	3	4	5	1	0	0	0	0
1.0 to 1.4	26	0	3	6	7	5	3	0	1	1	0
1.5 to 1.9	14	0	1	2	0	4	4	3	0	0	0
2.0 to 2.4	12	0	0	1	3	3	3	1	1	0	0
2.5 to 2.9	5	0	0	0	1	1	3	0	0	0	0
3.0 to 3.9	2	0	0	0	0	0	1	1	0	0	0
4.0 to 4.9	1	0	0	0	0	0	1	0	0	0	0
5.0 and over	1	0	0	0	0	0	0	1	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0
	Intermediate areas										
Total	566	34	56	73	67	96	88	76	51	21	4
None	176	20	34	41	24	19	12	14	8	3	1
Less than 0.5	62	5	10	8	8	13	9	4	2	3	0
0.5 to 0.9	83	7	7	7	9	19	19	8	4	3	0
1.0 to 1.4	61	1	3	8	9	19	12	7	1	1	0
1.5 to 1.9	48	1	1	3	6	10	6	14	6	0	1
2.0 to 2.4	39	0	1	3	3	10	9	7	5	1	0
2.5 to 2.9	32	0	0	1	8	1	5	9	5	3	0
3.0 to 3.9	31	0	0	1	0	2	10	5	9	3	1
4.0 to 4.9	20	0	0	1	0	3	3	6	4	3	0
5.0 and over	12	0	0	0	0	0	3	2	6	0	1
Unknown	2	0	0	0	0	0	0	0	1	1	0

TABLE 21. *Distribution of general hospital service areas of each type, by relative availability of skilled nursing home beds and percentage of population 65 years and over*—Continued

Skilled nursing home beds per 1,000 population in area, 1954	Number of areas										
	Total	Percent of population 65 years and over, 1950									
		Less than 5.0	5.0 to 5.9	6.0 to 6.9	7.0 to 7.9	8.0 to 8.9	9.0 to 9.9	10.0 to 10.9	11.0 to 11.9	12.0 to 13.9	14.0 and over
	Rural areas										
Total	1,254	63	86	160	175	176	164	180	123	102	25
None	773	53	72	135	138	121	93	76	38	38	9
Less than 0.5	79	5	8	7	8	12	13	14	7	4	1
0.5 to 0.9	92	3	0	5	8	13	13	17	19	12	2
1.0 to 1.4	77	1	2	3	11	6	11	17	12	9	5
1.5 to 1.9	63	0	1	4	2	6	14	13	12	10	1
2.0 to 2.4	37	0	1	1	2	6	5	8	7	4	3
2.5 to 2.9	33	0	1	1	2	3	5	13	5	2	1
3.0 to 3.9	52	1	1	3	1	4	6	9	14	11	2
4.0 to 4.9	30	0	0	0	3	2	1	10	4	9	1
5.0 and over	17	0	0	0	0	3	3	3	5	3	0
Unknown	1	0	0	1	0	0	0	0	0	0	0

Source: General Hospitals and Nursing Homes, Public Health Monograph No. 44, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 492 (Washington, 1956). A hospital service area takes into account factors which include size and distribution of population, geographic contours, transportation facilities, general trade patterns and hospital utilization practices. Most States follow county lines with a single county or a combination of counties making up an area.

Base areas must contain a teaching hospital of a medical school suitable for use as a base hospital in a coordinated hospital system, or have a total population of at least 100,000 and have, on completion of the hospital-construction program, at least 1 general hospital with at least 200 beds furnishing internships and residencies in 2 or more specialties.

Intermediate areas must have a population of at least 25,000 and contain, on completion of the hospital-construction program, at least 1 general hospital which has 100 or more beds and would be suitable for a base hospital in a coordinated hospital system.

Rural areas make up all other general hospital service areas which are developed by the State agencies.

Of the total of 1,932 general hospital service areas, 112 are base areas (serving 41 percent of the population), 566 are intermediate areas (serving 36 percent of the population), and 1,254 are rural areas (serving 22 percent of the population).

TABLE 22.—*Distribution of skilled nursing homes and beds, by type of ownership, by State and Territory, 1954*

State	Number of homes				Beds			
	Total	Type of ownership			Total number	Percent distribution by type of ownership		
		Proprietary	Voluntary	Public		Proprietary	Voluntary	Public
Total, 51 States and Territories reported [1]	[2] 6,539	5,953	387	198	[3] 171,816	70.7	13.8	15.5
Alabama	67	59	[4] 8	—	1,446	—	—	—
Arizona	7	7	0	0	132	100.0	0	0
Arkansas	61	54	5	2	1,281	71.3	8.6	20.1
California	573	530	23	20	12,806	74.3	7.6	18.2
Colorado	52	47	4	1	1,775	89.5	5.5	5.1
Connecticut	193	186	6	1	4,868	91.8	6.8	1.4
Delaware	1	0	1	0	44	0	100.0	0
District of Columbia	7	4	3	0	311	15.8	84.2	0
Florida	43	42	1	0	[3] 475	—	—	—
Georgia	56	47	8	1	1,822	63.9	35.0	1.1
Idaho	1	0	1	0	36	0	100.0	0
Illinois	527	481	14	32	[3] 16,753	61.0	8.3	30.8
Indiana	175	175	0	0	3,035	100.0	0	0
Iowa	278	247	30	1	6,303	69.8	29.9	.3
Kansas	5	[4] 4	[4] 1	—	118	—	—	—
Louisiana	53	47	6	0	1,631	79.7	20.3	0
Maine	189	187	2	0	2,491	89.0	11.0	0
Maryland	112	103	8	1	3,604	79.0	7.9	13.0
Massachusetts	484	468	14	2	10,854	91.7	6.6	1.7
Michigan	458	394	29	35	14,256	51.1	13.8	35.1
Minnesota	178	152	17	9	4,242	65.5	26.8	7.7
Mississippi	2	0	0	2	[3] 24	0	0	100.0
Missouri	95	77	18	0	3,832	55.7	44.3	0
Montana	8	7	0	1	289	83.7	0	16.3
Nebraska	3	0	3	0	440	0	100.0	0
Nevada	10	2	0	8	239	23.0	0	77.0
New Hampshire	75	69	3	3	1,681	72.0	5.6	22.4
New Jersey	147	118	17	12	5,220	56.8	14.3	28.9
New Mexico	36	34	0	2	547	63.3	0	36.7
New York	767	739	17	11	20,717	80.4	3.8	15.9
North Carolina	4	2	2	0	59	62.7	37.3	0
North Dakota	7	5	2	0	143	63.6	36.4	0
Ohio [5]	471	418	53	0	12,838	66 9	33.1	0
Oklahoma	109	102	6	1	1,927	86.8	11.1	2.1
Oregon [2]	171	159	6	5	3,914	81.3	4.3	13.7
Pennsylvania	146	115	0	31	7,448	36.2	0	63.8
Rhode Island	40	39	1	0	642	98.1	1.9	0
South Carolina	29	26	2	1	618	71.8	21.0	7.1
South Dakota	2	2	0	0	18	100.0	0	0
Tennessee	29	26	3	0	700	80.3	19.7	0
Texas [5]	120	114	6	0	2,683	90.1	9.9	0
Utah	3	1	2	0	73	13.7	86.3	0
Vermont	82	78	4	0	841	90.0	10.0	0
Virginia	144	134	7	3	3,129	72.8	9.4	17.8
Washington	298	264	26	8	8,964	77.0	19.1	3.9
West Virginia	51	43	6	2	1,697	66.4	8.7	24.9
Wisconsin	152	133	18	1	4,267	61.6	37.5	.9
Wyoming	13	11	1	1	151	68.2	18.5	13.2
Alaska	0	0	0	0	0	0	0	0
Hawaii	3	1	1	1	366	.5	11.7	87.7
Puerto Rico	2	0	2	0	66	0	100.0	0

[1] Virgin Islands did not report. Kentucky's total of 149 homes with 2,604 beds could not be classified by type of facility, for lack of information on level of service.

[2] Includes 1 home (22 beds) of unknown ownership.

[3] Incomplete figure. Number of beds not reported for some homes (21 homes in Florida, 28 homes in Illinois, 1 home in Mississippi, and proportionately negligible numbers in 5 other States).

[4] Probably incomplete.

[5] May be underreported since a considerable number of homes were not identified as to type of facility.

NOTE.—A dash (—) represents "not known."

Source: Solon, Jerry, and Anna Mae Baney, Ownership and Size of Nursing Homes, Public Health Reports, vol. 70 (May 1955), p. 439 (table 1).

TABLE 23.—*Comparison of skilled nursing home bed-population ratios relative to total population and aged population, by State, 1954*

State	Civilian population (in 1,000's), 1954	Population 65 years and over (in 1,000's), 1953	Skilled nursing home beds	Beds per 1,000 population		Rank order of State bed-population ratios [1]	
				Total population	Population 65 years and over	Total population	Population 65 years and over
Total	159,084	13,324	171,106	1.1	12.8	----------	----------
Alabama	3,100	208	1,401	.5	6.7	33	32
Arizona	974	51	132	.1	2.6	42	42
Arkansas	1,891	159	1,281	.7	8.1	28	27
California	12,213	973	12,439	1.0	12.8	18	19
Colorado	1,408	126	1,745	1.2	13.8	15	17
Connecticut	2,210	202	4,472	2.0	22.1	9	7
Delaware	362	28	44	.1	1.6	43	43
District of Columbia	820	64	271	.3	4.2	35	37
Florida	3,436	271	946	.3	3.5	38	38
Georgia	3,561	236	1,787	.5	7.6	30	30
Idaho	611	48	36	.1	.8	46	45
Illinois	9,106	835	16,517	1.8	19.8	10	10
Indiana	4,203	383	3,035	.7	7.9	26	28
Iowa	2,636	280	6,277	2.4	22.4	5	6
Kansas	1,972	205	118	.1	.6	45	46
Kentucky	2,928	239	1,279	.4	5.4	34	33
Louisiana	2,901	193	1,631	.6	8.5	29	26
Maine	916	94	2,441	2.7	26.0	3	5
Maryland	2,522	175	3,447	1.4	19.7	13	11
Massachusetts	4,906	513	10,841	2.2	21.1	6	8
Michigan	7,010	523	14,256	2.0	27.3	8	3
Minnesota	3,098	291	4,242	1.4	14.6	12	16
Mississippi	2,180	154	55	.0	.4	48	47
Missouri	4,115	433	3,832	.9	8.8	20	24
Montana	624	57	289	.5	5.1	32	34
Nebraska	1,358	141	440	.3	3.1	36	39
Nevada	209	13	239	1.1	18.4	17	12
New Hampshire	528	58	1,669	3.2	28.8	2	2
New Jersey	5,174	445	4,973	1.0	11.2	19	22
New Mexico	752	37	547	.7	14.8	25	14
New York	15,368	1,392	20,539	1.3	14.8	14	15
North Carolina	4,162	244	59	.0	.2	49	49
North Dakota	635	51	143	.2	2.8	40	41
Ohio	8,535	775	12,838	1.5	16.6	11	13
Oklahoma	2,232	204	1,915	.9	9.4	22	23
Oregon	1,634	149	3,914	2.4	26.3	4	4
Pennsylvania	10,755	954	7,448	.7	7.8	27	29
Rhode Island	790	75	642	.8	8.6	24	25
South Carolina	2,171	123	574	.3	4.7	39	35
South Dakota	659	59	18	.0	.3	47	48
Tennessee	3,344	245	700	.2	2.9	41	40
Texas	8,240	577	2,643	.3	4.6	37	36
Utah	753	47	73	.1	1.6	44	44
Vermont	383	39	797	2.1	20.4	7	9
Virginia	3,418	229	3,129	.9	13.7	21	18
Washington	2,459	232	8,964	3.6	38.6	1	1
West Virginia	1,946	140	1,665	.9	11.9	23	21
Wisconsin	3,574	334	4,212	1.2	12.6	16	20
Wyoming	302	21	151	.5	7.2	31	31

[1] Ranked from 1 to 49 with "1" assigned to the State with the highest ratio.

NOTE.—Source of population figures: Provisional estimates of the civilian population of continental United States, by regions, divisions, and States, and of Alaska, Hawaii, Pureto Rico, the Canal Zone, and the Virgin Islands: July 1, 1954. Current Population Reports, series P–25, No. 104, Washington, D. C., U. S. Bureau of the Census, Oct. 25, 1954; estimates of the civilian population of States, by broad age groups July 1, 1953. Current Population Reports, series P–25, No. 106, Washington, D. C., U. S. Bureau of the Census, Dec. 6, 1954.

Source: General Hospitals and Nursing Homes, Public Health Monograph No. 44, U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 492 (Washington, Government Printing Office, 1956), p. 37 (appendix table 2).

TABLE 24.—*Persons 65 and over in homes for the aged and dependent, by State, 1950*

State	Total homes for aged and dependent			Federal and State veterans and old soldiers homes		County and city homes, poor farms, and infirmaries		Nonprofit private homes for the aged		Commercial boarding, nursing, rest, and convalescent homes	
	Total	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
United States	217,536	93,418	124,118	10,185	4,023	30,416	15,590	20,189	45,312	32,424	59,484
Alabama	705	286	419			142	120	65	113	79	186
Arizona	521	321	200	117	58	49	21	4	4	151	117
Arkansas	566	257	309	15	49	157	106	18	65	67	89
California	16,979	7,347	9,632	1,241	63	2,895	1,502	895	2,632	2,316	5,435
Colorado	1,849	703	1,146	32	38	32	17	96	237	543	854
Connecticut	5,304	2,200	3,104	361	71	493	220	378	806	968	2,007
Delaware	405	121	284					96	137	25	147
Florida	2,649	1,503	1,146	205	19	120	68	394	398	784	661
Georgia	1,180	397	783	74	25	121	171	73	287	129	300
Idaho	609	357	252			94	25	28	13	235	214
Illinois	16,006	6,586	9,420	258	189	2,472	1,154	1,921	4,320	1,935	3,757
Indiana	6,904	3,128	3,776	269	242	1,397	688	555	950	907	1,896
Iowa	6,027	2,661	3,366	352	268	846	573	411	832	1,052	1,693
Kansas	3,137	1,345	1,792	112	235	406	249	264	539	563	769
Kentucky	2,045	927	1,118	74	25	355	199	244	482	254	412
Louisiana	1,194	460	734	16	23	55	32	263	505	126	174
Maine	1,657	725	932	208	81	29	15	116	221	372	615
Maryland	3,149	799	2,350	42	18	178	113	227	1,217	352	1,002
Massachusetts	12,570	4,178	8,392	100	31	1,069	617	818	2,198	2,191	5,546
Michigan	7,688	3,370	4,318	264	139	1,013	436	642	1,520	1,451	2,223
Minnesota	6,276	2,948	3,328	92	139	824	153	874	1,527	1,158	1,509
Mississippi	581	349	232	145	18	96	73	91	104	17	37
Missouri	7,829	3,100	4,729	77	109	924	827	634	1,413	1,465	2,380
Montana	660	416	274	29	8	159	58	91	74	137	134
Nebraska	2,974	1,289	1,685	122	137	56	44	215	328	896	1,176
Nevada	152	113	39			65	17			48	22
New Hampshire	1,886	797	1,089	85	21	400	159	107	337	205	572
New Jersey	6,733	2,638	4,095	109	38	1,091	676	713	1,441	725	1,940
New Mexico	134	91	43	69	20			1	2	21	21
New York	30,183	13,050	17,133	1,301	498	5,152	1,984	3,927	8,881	2,670	5,770
North Carolina	1,765	757	1,008	105	113	445	370	45	220	162	305
North Dakota	1,089	642	447	103	16	44	39	260	217	235	175
Ohio	15,390	7,336	8,054	515	119	3,624	1,460	1,316	2,406	1,881	4,069
Oklahoma	1,158	563	595	55	34	55	38	47	73	406	450
Oregon	2,946	1,324	1,622	136	33	275	90	224	430	689	1,069
Pennsylvania	19,739	7,857	11,882	334	123	3,559	2,065	1,892	5,591	2,072	4,103
Rhode Island	1,470	473	997	65	29	24	16	175	307	209	645

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TABLE 24.—*Persons 65 and over in homes for aged and dependent, by State, 1950*—Continued

State	Total homes for aged and dependent			Federal and State veterans and old soldiers homes		County and city homes, poor farms, and infirmaries		Nonprofit private homes for the aged		Commercial boarding, nursing, rest, and convalescent homes	
	Total	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
South Carolina	629	195	434	36	94	77	72	32	143	50	125
South Dakota	1,087	584	503	158	98	29	21	81	112	316	272
Tennessee	2,103	966	1,137	269	13	391	395	134	255	172	474
Texas	3,737	1,766	1,971	334	49	207	101	236	437	989	1,384
Utah	462	243	219	41	18	95	72	----	----	107	129
Vermont	615	181	434	30	26	29	44	44	92	78	272
Virginia	2,524	1,164	1,360	255	53	262	190	355	482	292	635
Washington	5,559	2,590	2,969	252	177	136	69	519	641	1,683	2,082
West Virginia	1,368	782	586	294	169	209	70	116	142	163	205
Wisconsin	5,276	2,305	2,971	385	183	449	159	446	1,357	1,025	1,272
Wyoming	151	82	69	23	13	16	2	----	----	43	54
District of Columbia	1,886	1,145	741	1,026	101	----	----	109	524	10	106

Source: U. S. Bureau of the Census, United States Census of Population: 1950, vol. IV, Special Reports, Pt. 2, ch. C, Institutional Population. U. S. Government Printing Office, Washington, D. C., 1953, as printed in the Council of State Governments, The States and Their Older Citizens (Chicago, 1955), p. 148.

PART IV. Economic Data on Medical Care

TABLE 25.—*Percentage distribution of persons, by level of gross total charges for all personal health services, by age (percentages may not add up to 100 because of rounding)*

Gross total charges	Percent distribution, by age						
	All persons (8,898 [1])	Under 6 (1,177 [1] persons)	6 to 17 (1,852 [1] persons)	18 to 34 (1,959 [1] persons)	35 to 54 (2,336 [1] persons)	55 to 64 (780 [1] persons)	65 and over (767 [1] persons)
No gross charges	30	35	36	28	26	26	28
Under $46	38	47	43	37	36	32	32
$46 to $94	14	10	11	13	16	17	17
$95 to $194	10	6	7	11	11	11	11
$195 and over	8	2	4	11	11	13	13
Gross charges unknown	(2)	(2)	(2)	(2)	(2)	(2)	(2)

[1] Figures equal 100 percent.
[2] Half, or less than half, of 1 percent.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 151. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 3,809 families (8,846 individuals), including 767 persons aged 65 and over.

TABLE 26.—*Distribution of aged economic units (married couples with head aged 65 and over and other persons aged 65 and over) by money income and by expense for medical services, 1951*

[Continental United States; noninstitutional population]

Money income	Distribution of economic units by income	Distribution of economic units by expense for medical service					
		Total	No medical services	No expense [1]	$1 to $49	$50 to $149	$150 to $299	$300 and over
Total	100 0	100 0	35. 7	4. 8	23. 8	20. 2	7. 6	7. 9
Under $500	41. 3	100. 0	36. 6	4. 2	24. 2	20. 6	7. 3	7. 1
$500 to $999	24. 0	100 0	34. 7	7. 3	26 9	18. 2	7. 7	5. 2
$1,000 to $1,999	16. 6	100 0	34. 1	4. 4	23. 5	23. 7	6. 3	8 0
$2,000 to $2,999	7. 5	100 0	39 0	3. 1	22. 6	18. 8	8. 8	7. 6
$3,000 to $3,999	4. 9	100 0	31. 7	3. 9	21. 1	23 0	7 0	13. 3
$4,000 to $5,999	3. 7	100 0	41. 6	3. 3	13. 4	12. 9	9. 3	19. 5
$6,000 to $9,999	1 1	100. 0	31. 5	3. 7	11. 1	18. 5	17. 6	17. 6
$10,000 and over	.8	100 0	25. 3	-------	17. 7	15. 2	17. 7	24. 1

[1] No out-of-pocket expense because of free care, insurance, or payment by other resources.

Source: Data from a special survey conducted by the Bureau of the Census for the Institute of Industrial Relations, University of California, Berkeley, to be published in a forthcoming volume, Economic Status of the Aged.

TABLE 27.—*Mean insurance benefits received per person and per person receiving benefits, by age and sex*

Age and sex	Mean insurance benefits received	
	Per person	Per person receiving benefits
All insured persons (males and females), total	$17	$116
Under 6 [1]	7	55
6 to 17	11	98
18 to 34	21	123
35 to 54	19	126
55 to 64	25	149
65 and over	28	150
Insured males, total	13	102
Under 6 [1]	9	59
6 to 17	12	92
18 to 34	8	91
35 to 54	16	115
55 to 64	26	161
65 and over	17	102
Insured females, total	21	126
Under 6 [1]	6	51
6 to 17	10	105
18 to 34	31	132
35 to 54	23	135
55 to 64	24	139
65 and over	41	195

[1] These means are slightly deflated by virtue of the fact that each child born during the survey year is treated as a "whole" person, i. e., counted as 1 in computing the mean for the year.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956) p. 167. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 19 3 and is based on single interviews in 3,809 families (8,846 individuals), including 767 persons aged 65 and over.

TABLE 28.—*Specified unmet needs of persons 65 and over in California*

Specified unmet needs:	*Percent*
Medical care and drugs	14
Clothing	12
False teeth	8
Glasses	6
Telephone	6
Household equipment	4
Hospital care	3
Housing	3
Laundry service	2
Other utilities	2
Hearing aid	1
Other	1

Source: Bond, Floyd A., et al., Our Needy Aged: A California Study of a National Problem (New York, 1954), p. 34. The study was conducted by the Social Science Research Center at Pomona college. Intensive interviews with 890 specific individuals chosen from 878,000 persons 65 and over in California to provide a representative sampling.

TABLE 29.—*Mean gross total charges per person, and mean gross total charges per person incurring gross total charges, by age, sex, and insurance status*

Age and sex	Mean gross total charges per person					
	All persons			Persons incurring gross total charges		
	All	Insured	Uninsured	All	Insured	Uninsured
All persons (male and female), total	$65	$74	$55	$94	$98	$87
Under 6 [1]	28	35	20	44	48	36
6 to 17	38	48	24	59	65	47
18 to 34	70	84	51	98	108	80
35 to 54	80	89	66	109	116	96
55 to 64	96	106	85	131	142	117
65 and over	102	111	98	140	140	141
Males, total	51	60	39	78	84	69
Under 6 [1]	29	38	19	45	52	33
6 to 17	35	44	23	57	60	50
18 to 34	43	56	27	71	82	54
35 to 54	60	69	43	89	97	71
55 to 64	88	105	66	127	147	99
65 and over	[2] 77	[2] 70	80	[2] 115	[2] 98	124
Females, total	80	88	70	106	110	100
Under 6 [1]	28	32	22	43	44	40
6 to 17	41	51	26	61	70	44
18 to 34	94	106	75	114	123	98
35 to 54	100	108	86	125	131	114
55 to 64	104	108	100	134	137	130
65 and over	124	158	112	161	181	152

[1] These means are slightly deflated by virtue of the fact that each child born during the survey year is treated as a "whole" person, i. e., counted as 1 in computing the mean for the year.

[2] The dip in charges for males after age 65 cannot be explained on any reasonable basis. Granted the adequacy of the method of collecting data, this seeming anomaly must stand as a simple fact. Unpublished data from insured families in Boston and Birmingham do not corroborate or deny the above pattern.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956) p. 126. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 30.—*Mean gross hospital charges per person, and mean gross hospital charges per person incurring gross hospital charges, by age and sex and insurance status*

Age and sex	Mean gross hospital charges per person					
	All persons			Persons incurring gross hospital charges		
	All	Insured [1]	Uninsured	All	Insured [1]	Uninsured
All persons (male and female), total	$13	$16	$9	$140	$140	$142
Under 6 [2]	5	6	2	70	72	63
6 to 17	6	9	2	103	112	64
18 to 34	15	19	9	110	123	84
35 to 54	15	17	11	161	165	152
55 to 64	20	24	15	217	205	244
65 and over	25	31	22	233	203	254
Males, total	9	12	6	143	142	145
Under 6 [2]	5	7	2	71	73	62
6 to 17	6	9	2	95	102	68
18 to 34	5	8	1	124	139	66
35 to 54	12	14	9	176	179	166
55 to 64	18	24	10	240	261	190
65 and over	[3] 16	[3] 16	17	[3] 176	[3] 131	211
Females, total	17	20	13	139	138	140
Under 6 [2]	5	6	3	69	72	55
6 to 17	6	10	2	111	124	60
18 to 34	23	28	16	108	120	85
35 to 54	18	21	14	153	156	145
55 to 64	22	25	19	203	171	275
65 and over	32	50	26	275	261	285

[1] Insured persons are persons with hospital insurance at end of the survey year.
[2] These means are slightly deflated by virtue of the fact that each child born during the survey year is treated as a "whole" person, i. e., counted as 1 in computing the mean for the year.
[3] The dip in charges for males after age 65 cannot be explained on any reasonable basis. Granted the adequacy of the method of collecting data, this seeming anomaly must stand as a simple fact. Unpublished data from insured families in Boston and Birmingham do not corroborate or deny the above pattern.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956) p. 127. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 31.—*Percentage distribution of persons, by level of gross hospital charges and age*

[Percentages may not add up to 100 because of rounding]

Gross hospital charges	Percent distribution, by age						
	All persons (8,898 [1])	Under 6 (1,177 [1] persons)	6–17 (1,852 [1] persons)	18–34 (1,959 [1] persons)	35–54 (1,495 [1] persons)	55–64 (780 [1] persons)	65 and over (767 [1] persons)
No gross charges	91	93	94	87	90	91	89
Under $46	2	3	2	2	1	1	1
$46 to $94	3	2	2	5	3	1	2
$95 to $194	3	1	2	5	3	3	3
$195 and over	2	(2)	(2)	1	2	4	3
Gross hospital charges unknown	(2)	(2)	(2)	(2)	(2)	(2)	(2)

[1] Figures equal 100 percent.
[2] Half, or less than half, of 1 percent.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 152. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 3,809 families (8,846 individuals), including 767 persons aged 65 and over.

TABLE 32.—*Mean gross physicians' charges per person, and mean gross physicians' charges per person incurring gross physicians' charges, by age and sex and insurance status*

Age and sex	Mean gross physicians' charges per person					
	All persons			Persons incurring gross physicians' charges		
	All	Insured [1]	Uninsured	All	Insured [1]	Uninsured
All persons (male and female), total	$25	$38	$21	$57	$58	$57
Under 6 [2]	15	18	11	28	30	25
6 to 17	13	16	9	37	38	36
18 to 34	29	35	21	67	73	55
35 to 54	29	32	25	67	68	66
55 to 64	35	36	33	76	74	78
65 and over	36	36	36	74	65	78
Males, total	19	22	15	51	51	49
Under 6 [2]	15	19	10	28	31	24
6 to 17	13	16	9	40	38	45
18 to 34	17	24	9	60	72	38
35 to 54	19	22	14	54	57	46
55 to 64	32	34	29	75	72	81
65 and over	[3] 30	[3] 27	32	[3] 68	[3] 54	77
Females, total	31	33	28	62	62	62
Under 6 [2]	15	16	12	28	29	26
6 to 17	13	16	9	35	38	30
18 to 34	39	44	33	70	74	63
35 to 54	39	41	35	76	75	78
55 to 64	37	38	35	77	77	76
65 and over	41	47	39	78	77	79

[1] Insured persons are those with hospital insurance at end of survey year.
[2] These means are slightly deflated by virtue of the fact that each child born during the survey year is treated as a "whole" persons, i. e., counted as 1 in computing the mean for the year.
[3] The dip in charges for males after age 65 cannot be explained on any reasonable basis. Granted the adequacy of the method of collecting data, this seeming anomaly must stand as a simple fact. Unpublished data from insured families in Boston and Birmingham do not corroborate or deny the above pattern.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956) p. 128. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals), including 767 persons aged 65 and over.

TABLE 33.—*Percentage distribution of persons, by level of gross physicians' charges, by age*

[Percentages may not add up to 100 because of rounding]

Gross physicians' charges	Percent distribution, by age						
	All persons (8,898 [1])	Under 6 (1,177 [1] persons)	6 to 17 (1,852 [1] persons)	18 to 34 (1,959 [1] persons)	35 to 54 (2,336 [1] persons)	55 to 64 (780 [1] persons)	65 and over (767 [1] persons)
No gross charges	56	46	65	57	56	54	51
Under $46	28	45	27	25	26	25	26
$46 to $94	8	6	5	8	8	9	12
$95 to $194	5	2	3	7	6	6	6
$195 and over	2	(2)	1	3	4	5	4
Gross charges unknown	(2)	(2)	(2)	(2)	(2)	(2)	(2)

[1] Figures equal 100 percent.
[2] Half, or less than half, of 1 percent.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 153. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953 and is based on single interviews in 3,809 families (8,846 individuals), including 767 persons aged 65 and over.

TABLE 34.—*Mean gross medicines charges per person, and mean gross medicines charges per person incurring gross medicines charges, by age and sex and insurance status*

Age and sex	Mean gross medicines charges per person					
	All persons			Persons incurring gross medicines charges		
	All	Insured [1]	Uninsured	All	Insured [1]	Uninsured
All persons (male and female), total	$10	$10	$9	$26	$25	$27
Under 6 [2]	6	7	5	15	15	15
6 to 17	5	5	4	16	16	17
18 to 34	8	8	6	22	22	22
35 to 54	11	12	10	29	29	28
55 to 64	15	17	13	35	42	28
65 and over	22	23	21	42	40	42
Males, total	7	8	6	23	23	23
Under 6 [2]	7	9	5	16	17	15
6 to 17	4	4	3	16	14	20
18 to 34	5	6	5	21	21	21
35 to 54	7	8	6	23	24	21
55 to 64	12	15	8	31	38	22
65 and over	17	17	16	37	38	36
Females, total	12	12	12	28	26	29
Under 6 [2]	6	6	5	14	14	15
6 to 17	5	6	4	17	18	15
18 to 34	10	11	8	22	22	23
35 to 54	15	16	14	33	33	33
55 to 64	18	20	16	38	45	32
65 and over	26	29	25	45	43	46

[1] Insured persons are those with hospital insurance at end of survey year.
[2] These means are slightly deflated by virtue of the fact that each child born during the survey year is treated as a whole person, i. e., counted as 1 in computing the mean for the year.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956) p. 129. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 35.—*Mean gross "other" medical charges per person, and mean gross "other" medical charges per person incurring gross "other" medical charges, by age and sex and insurance status*

Age and sex	Mean gross "other" medical charges per person [1]					
	All persons			Persons incurring gross "other" medical charges		
	All	Insured [2]	Uninsured	All	Insured [2]	Uninsured
All persons (male and female), total	$8	$9	$7	$38	$38	$40
Under 6 [3]	1	1	1	22	20	24
6 to 17	4	4	3	26	26	26
18 to 34	7	7	6	32	31	33
35 to 54	11	13	8	39	41	35
55 to 64	15	15	14	45	44	47
65 and over	17	19	16	61	64	59
Males, total	7	7	6	37	36	40
Under 6 [3]	1	1	1	21	21	20
6 to 17	3	4	3	27	26	30
18 to 34	6	7	4	38	38	38
35 to 54	9	10	7	37	37	36
55 to 64	15	16	13	48	46	51
65 and over	[4] 11	[4] 8	12	[4] 46	[4] 34	52
Females, total	9	10	9	39	39	39
Under 6 [3]	1	1	1	23	19	31
6 to 17	4	5	4	25	26	24
18 to 34	7	8	7	29	28	31
35 to 54	13	16	10	41	45	34
55 to 64	15	15	16	43	42	45
65 and over	23	32	19	71	87	63

[1] Gross "other" medical charges include medical appliances; ophthalmic products; services of oculists and optometrists; services of chiropractors, chiropodists, podiatrists, naturopaths, faith healers, etc.; the services of private-duty nurses, practical nurses, and midwives; and expenditures for laboratory services like diagnostic tests and X-rays for which the consumer was billed directly by the laboratory.

[2] Insured persons are those with hospital insurance at end of survey year.

[3] These means are slightly deflated by virtue of the fact that each child born during the survey year is treated as a whole person, i. e., counted as 1 in computing the mean for the year.

[4] The dip in charges for males after age 65 cannot be explained on any reasonable basis. Granted the adequacy of the method of collecting data, this seeming anomaly must stand as a simple fact. Unpublished data from insured families in Boston and Birmingham do not corroborate or deny the above pattern.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 130. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 3,809 families (8,846 individuals), including 767 persons aged 65 and over.

TABLE 36.—*Mean dental charges per person, and mean dental charges per person incurring dental charges, by age and sex and insurance status*

Age and sex	Mean dental charges per person					
	All persons			Persons incurring dental charges		
	All	Insured [1]	Uninsured	All	Insured [1]	Uninsured
All persons (male and female), total	$10	$12	$8	$32	$32	$32
Under 6 [2]	1	2	[3]	16	18	10
6 to 17	11	13	7	25	26	22
18 to 34	13	15	10	31	32	28
35 to 54	14	15	11	37	37	36
55 to 64	13	13	12	53	52	55
65 and over	4	3	5	37	24	43
Males, total	9	11	6	31	32	29
Under 6 [2]	1	2	1	14	16	11
6 to 17	9	12	6	24	24	23
18 to 34	11	13	8	31	31	30
35 to 54	12	14	8	35	37	30
55 to 64	11	15	7	49	57	34
65 and over	5	3	6	43	36	47
Females, total	12	13	9	33	33	34
Under 6 [2]	2	2	1	17	19	9
6 to 17	12	15	8	26	28	22
18 to 34	15	17	11	31	33	27
35 to 54	15	17	13	38	37	40
55 to 64	14	12	17	57	48	68
65 and over	3	2	4	31	12	39

[1] Insured persons are those with hospital insurance at the end of the survey year.
[2] These means are slightly deflated by virtue of the fact that each child born during the survey year is treated as a whole person, i. e., counted as 1 in computing the mean for the year.
[3] 50 cents or less.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956) p. 131. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 37.—*Percentage of families with voluntary health insurance, by sex and age of family head*

Age and sex of family head	Number of families interviewed	Families with some coverage, percent
Total, all families	2,809	63
With male head, total	2,406	66
Under 25	104	62
25 to 29	222	72
30 to 34	303	69
35 to 44	613	72
45 to 54	476	70
55 to 64	352	66
65 to 74	239	50
75 and over	79	35
Age indeterminate	18	39
With female head, total	403	48
Under 35	52	56
35 to 44	53	53
45 to 54	65	69
55 to 64	89	55
65 to 74	84	32
75 and over	55	27
Age indeterminate	5	40

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956) p. 108. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals) including 767 persons aged 65 and over.

TABLE 38.—*Percentage of persons with hospital insurance, by age and sex*

Age and sex	Number of persons interviewed	Persons with hospital insurance, percent
All persons (males and females), total	8,846	57
Under 6	1,171	57
6 to 17	1,851	58
18 to 24	699	49
25 to 34	1,258	64
35 to 44	1,330	65
45 to 54	997	63
55 to 64	773	54
65 and over	740	31
Age unknown	27	[1]
Males, total	4,284	57
Under 6	584	55
6 to 17	936	58
18 to 24	308	42
25 to 34	599	63
35 to 44	637	64
45 to 54	496	65
55 to 64	363	56
65 and over	351	35
Age unknown	10	[1]
Females, total	4,562	57
Under 6	587	59
6 to 17	915	59
18 to 24	391	67
25 to 34	659	65
35 to 44	693	65
45 to 54	501	61
55 to 64	410	52
65 and over	389	26
Age unknown	17	[1]

[1] Percentages not computed for groups of fewer than 50 individuals.

Source: Odin W. Anderson and Jacob J. Feldman, Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey (New York, 1956), p. 107. Data obtained from a nationwide survey of family medical costs and voluntary health insurance by the Health Information Foundation. The survey was conducted in July 1953, and is based on single interviews in 2,809 families (8,846 individuals).

TABLE 39.—*Amount of group hospital and surgical benefits continued for retired employees (National Industrial Conference Board survey)*

Amount	Companies continuing hospital benefits		Companies continuing surgical benefits	
	Number	Percent	Number	Percent
Total	71	100.0	64	100.0
Continued unchanged	33	46.5	[1] 33	51.6
Amount decreased	30	42.3	26	40.6
Restricted to 1 maximum	17	23.9	14	21.9
Restricted to dollar maximum:				
$200	----	----	3	4.7
$225	----	----	1	1.6
$500	3	4.2	2	3.1
$615	1	1.4	----	----
$710	1	1.4	----	----
$1,000	1	1.4	----	----
$1,500	1	1.4	----	----
$2,900	1	1.4	----	----
Benefits reduced, no details	5	7.0	[2] 6	9.4
No reply	8	11.3	5	7.8

[1] In 1 company, benefits for hourly, but not salaried employees.
[2] In 1 company, benefits for salaried, but not hourly employees.

Source: Management Record, March 1955, table 3, p. 106.

TABLE 40.—*Effect of age at hiring on availability or level of benefits under health and insurance plans* [1]

Provision	Life insurance		Accidental death and dismemberment benefits		Accident and sickness benefits		Hospital benefits		Surgical benefits		Medical benefits	
	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers
		Thousands		*Thousands*		*Thousands*		*Thousands*		*Thousands*		*Thousands*
All plans providing benefits	284	4,352	154	2,250	[2] 237	3,675	293	4,908	294	4,917	193	3,683
Availability or level of benefit not affected by age at hiring	252	3,330	148	1,803	179	2,770	286	4,628	288	4,673	182	3,482
Reduced benefit provided if hired after age	21	649	4	25	56	866	7	280	4	238	10	200
55	1	35										
60	3	53	2	16	[3] 54	[3] 438	[3] 2	[3] 38	[3] 2	[3] 38	[3] 9	[3] 80
65	15	552	2	9	2	428	2	200	2	200	1	120
66	1	2										
68	1	7										
70							3	42				
Benefit not available if hired after age	7	225	2	422	2	40			2	6	1	1
50	1	10										
55	3	12			1	35			1	1	1	1
65	3	203	1	415								
68			1	7								
70					1	5			1	5		
Other	[4] 4	148										

[1] Based on a study of 300 health and insurance plans under collective bargaining covering approximately 5 million workers.

[2] Excludes plans providing only for occupational disability benefits.

[3] Includes 1 plan covering 37,000 workers which provides a reduced amount of insurance if hired after age 60 for 1st 36 months of employment. Thereafter, same benefits are provided as for employee hired prior to age 60.

[4] Includes 2 plans covering 135,000 workers providing a reduced amount of insurance to workers becoming union members after age 55 and 2 plans covering 13,000 workers that do not provide life insurance to workers becoming union members at age 56 or later.

NOTE.—Due to rounding, sums of individual items do not necessarily equal totals.

TABLE 41.—*Benefit levels under health and insurance plans for workers retiring at age 65 compared with those provided immediately prior to retirement* [1]

Benefit level for retired worker	Life insurance		Hospital benefits		Surgical benefits		Medical benefits	
	Plans	Workers (thousands)	Plans	Workers (thousands)	Plans	Workers (thousands)	Plans	Workers (thousands)
All plans extending benefits to retired workers	146	3,108	67	1,784	58	1,745	35	1,491
Benefits for retired worker:								
Same as for active worker before retirement	[2] 29	726	39	1,407	39	1,425	25	1,231
Less than for active worker in 1 or more respects	117	2,383	28	377	19	320	10	260

[1] Based on a study of 300 health and insurance plans under collective bargaining covering approximately 5 million workers.

[2] Includes 6 plans which maintained same level of insurance on retirement for a specified period only, e. g., 1 year.

NOTE.—Due to rounding, sums of individual items do not necessarily equal totals.

Source: Older Workers Under Collective Bargaining, pt. II. Health and Insurance Plans, Pension Plans, Bulletin No. 1199–2 (October 1956), U. S. Department of Labor, Bureau of Labor Statistics (Washington, 1956), p. 8.

TABLE 42.—*Relationship of hospital, surgical, and medical benefits of retired workers and their dependents* [1]

Provision	Hospital benefits		Surgical benefits		Medical benefits	
	Plans	Workers (thousands)	Plans	Workers (thousands)	Plans	Workers (thousands)
All plans extending benefits to retired workers and dependents	56	1,729	48	1,690	31	1,346
Same benefits provided retired worker and dependents	52	1,702	47	1,687	28	1,323
Different benefits provided retired worker and dependents	4	27	1	3	3	23

[1] Based on a study of 300 health and insurance plans under collective bargaining covering approximately 5 million workers.

TABLE 43.—*Method of financing benefits for retired workers and their dependents under health and insurance plans* [1]

Method of financing benefits	Retired workers								Dependents of retired workers					
	Life		Hospital		Surgical		Medical		Hospital		Surgical		Medical	
	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers
		Thousands		*Thousands*		*Thousands*		*Thousands*		*Thousands*		*Thousands*		*Thousands*
All plans extending benefits to retired workers	146	3,108	67	1,784	58	1,745	35	1,491	56	1,729	48	1,690	31	1,346
Employer only	97	2,295	29	746	22	713	16	744	18	657	15	647	11	559
Employer and retired worker	16	128	14	119	13	118	6	52	11	104	11	104	6	52
Employer and active worker	16	495	1	17	1	17	1	17	1	17	1	17	1	17
Retired worker only	7	94	23	901	22	896	12	678	26	950	21	922	13	717
Other	10	96												

[1] Based on a study of 300 health and insurance plans under collective bargaining covering approximately 5 million workers.

NOTE.—Due to rounding, sums of individual items do not necessarily equal totals.

Source: Older Workers Under Collective Bargaining, pt. II, Health and Insurance Plans, Pension Plans, Bull. No. 1199–2 (October 1956), U. S. Department of Labor, Bureau of Labor Statistics (Washington, 1956), p. 12.

TABLE 44.—*Relationship of hospital, surgical, and medical benefits of retired workers and their dependents* [1]

Provision	Hospital benefits		Surgical benefits		Medical benefits	
	Plans	Workers	Plans	Workers	Plans	Workers
All plans extending benefits to retired workers and dependents	56	*Thousands* 1,729	48	*Thousands* 1,690	31	*Thousands* 1,346
Same benefits provided retired worker and dependents	52	1,702	47	1,687	28	1,323
Different benefits provided retired worker and dependents	4	27	1	3	3	23

[1] Based on a study of 300 health and insurance plans under collective bargaining covering approximately 5 million workers.

Source: Older Workers Under Collective Bargaining, pt. II. Health and Insurance Plans, Pension Plans, Bull. No. 1199–2 (October 1956), U .S. Department of Labor, p. 12.

TABLE 45.—*Method of financing benefits for retired workers and their dependents under health and insurance plans* [1]

Method of financing benefits	Retired workers								Dependents of retired workers					
	Life		Hospital		Surgical		Medical		Hospital		Surgical		Medical	
	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers
		Thousands		*Thousands*		*Thousands*		*Thousands*		*Thousands*		*Thousands*		*Thousands*
All plans extending benefits to retired workers	146	3,108	67	1,784	58	1,745	35	1,491	56	1,729	48	1,690	31	1,346
Employer only	97	2,295	29	746	22	713	16	744	18	657	15	647	11	559
Employer and retired worker	16	128	14	119	13	118	6	52	11	104	11	104	6	52
Employer and active worker	16	495	1	17	1	17	1	17	1	17	1	17	1	17
Retired worker only	7	94	23	901	22	896	12	678	26	950	21	922	13	717
Other	10	96												

[1] Based on a study of 300 health and insurance plans under collective bargaining covering approximately 5 million workers.

NOTE.—Due to rounding, sums of individual items do not necessarily equal totals.

Source: Older Workers Under Collective Bargaining, pt. II. Health and Insurance Plans, Pension Plans, Bull. No. 1199-2 (October 1956), U. S. Department of Labor, Bureau of Labor Statistics (Washington, 1956), p. 12.

TABLE 46.—*Prevalence of benefits under health and insurance plans by groups covered*

Group covered	Life insurance		Accidental death and dismemberment benefits		Accident and sickness benefits		Hospital benefits		Surgical benefits		Medical benefits	
	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers
		Thousands		*Thousands*		*Thousands*		*Thousands*		*Thousands*		*Thousands*
All plans studied	300	4,981	300	4,981	300	4,981	300	4,981	300	4,981	300	4,981
With benefits for:												
Active worker	284	4,352	[1] 154	2,250	[2] 239	3,695	293	4,908	294	4,917	193	3,683
Dependents of active worker	7	215					278	4,279	263	4,190	145	2,774
Retired worker	146	3,108	5	58			67	1,784	58	1,745	35	1,491
Dependents of retired worker							56	1,729	48	1,690	31	1,346

[1] 1 plan did not provide for accidental death benefit.
[2] 2 plans provide occupational accident and sickness benefits only.

Source: Older Workers Under Collective Bargaining, pt. II. Health and Insurance Plans, Pension Plans, Bull. No. 1199-2 (October 1950), U. S. Department of Labor, Bureau of Labor Statistics (Washington, 1956), p. 6.

TABLE 47.—*Maintenance of benefits for active workers under health and insurance plans* [1]

Provision	Life insurance		Accidental death and dismemberment benefits		Accident and sickness benefits		Hospital benefits		Surgical benefits		Medical benefits	
	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers	Plans	Workers
		Thousands		*Thousands*		*Thousands*		*Thousands*		*Thousands*		*Thousands*
All plans providing benefits	284	4,352	154	2,250	[2] 237	3,675	293	4,908	294	4,917	193	3,683
Maintained at constant level without regard to age	264	3,588	153	2,243	182	3,257	287	4,665	290	4,711	184	3,520
Reduced at specified age	19	761			54	414	6	243	3	201	9	163
Age 60					53	401	1	1	1	1	8	43
Age 65	17	752			1	13	2	200	2	200	1	120
Age 66	1	2										
Age 68	1	7										
Age 70							3	42				
Discontinued at specified age	1	3	1	7	1	5			1	5		
Age 65	1	3										
Age 68			1	7								
Age 70					1	5			1	5		

[1] Based on a study of 300 health and insurance plans under collective bargaining covering approximately 5 million workers.

[2] Excludes plans providing only for occupational disability benefits.

Source: Older Workers Under Collective Bargaining, pt. II. Health and Insurance Plans, Pension Plans, Bulletin No. 1199–2 (October 1956), U. S. Department of Labor, Bureau of Labor Statistics (Washington, 1956), p. 6.